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A Minimalist Perspective of Interrogatives in the Punjabi Language

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Abstract

Chomsky’s Theory of Universal Grammar (UG) (1993, 1995) incorporates some universal principles for grammatical descriptions of all possible human languages. It is because all aspects of human languages may not be universal; this theory also offers some parameters through which languages may vary from one to another. The Minimalist Program (MP) (Chomsky, 1993) as a part of UG follows minimalist principles such as the principle of economy, the principle of uniformity, and the search for simplicity, which guide the creation of grammatical rules and representations. The current study analysed the interrogative sentences in Punjabi to determine the similarities between Punjabi and English by using the Minimalist Program (MP) as a theoretical framework. Almost all Punjabi dialects or Standard Punjabi published in the academic context provide many ways to express interrogation. Two common types of interrogative sentences analysed here include yes-no questions and wh-questions which are also called k-questions in Punjabi because they start with a k sound, for instance, kitthe (where), kinj (how), kaunN (why), kii (what), etc, have been analysed. The analysis showed that there is no obligatory movement, either in the case of yes-no questions or in wh-movement in Punjabi, such as in English. Similarly, unlike English, there is neither the movement of auxiliaries nor of any other word in any interrogative sentence. Furthermore, the study concluded that the analysis of the Punjabi language through minimalism is possible and, therefore, it is implied that Punjabi follows the proposed principle of Universal Grammar.

Keywords: English and Punjabi sentence structure, interrogative sentences, Minimalist Program (MP), Universal Grammar (UG), wh-movement

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A Minimalist Perspective of Interrogatives…

Introduction

All languages possess distinct features that characterise them as human languages. Due to the uniqueness inherent in human languages, certain researchers attempted to identify the universal traits across languages and termed them as universal grammar (UG) (Hinzen & Sheehan, 2017). However, the notion of universality in language structure has been critiqued by numerous researchers (Evans & Levinson, 2009; Mendivil-Giró, 2018) because of the extensive diversity found in different languages.

Researchers (Dayal & Mahajan, 2004; Gargesh, 2020) concurred that South Asian languages share several syntactic features despite significant variations. For instance, Punjabi and Urdu exhibit similar syntactic patterns; however, differences arise due to Punjabi's tonal nature (Kamran & Saghir, 2019). Therefore, it may be more appropriate to conduct a separate study for each syntactic feature of these languages, rather than assuming commonalities based on their similarities. In accordance with this perspective, the current study investigated interrogative structures in Punjabi along with those in English by utilizing the Minimalist Program (MP) (Chomsky, 1995).

Punjabi, also known as Panjabi (Bauer, 2007), belongs to the Indo-Aryan family of languages (Indo-European). It is further categorized into two varieties: Eastern Punjabi (ISO 639-3 pan) and Western Punjabi (ISO 639-3 pnb) (Eberhard et al., 2021). However, this distinction is more geographical and political in nature, and there is little difference in the intelligibility of the two varieties (Language Resource Center, 2017; Yule et al., 2013). The Punjabi language varies from other Indo-Aryan languages in numerous aspects (Tahir, 2020), and it may also diverge in terms of interrogatives or question sentences. Like other languages, Punjabi predominantly features two types of interrogatives: yes-no questions and wh-questions (Bhatia, 1993; Mann, 2011). The current study attempted to analyse the deep structural changes that occur when questions are formulated in the Punjabi language.

In this context, the study delved into the widely discussed concept of *wh*-movement in the Punjabi language, in conjunction with yes-no questions. Since the term “*wh*-movement” originates from generative grammar (Graf & Kostyszyn, 2021; Stockwell et al., 1973), the study examined empirical data through the theoretical lens of generative
grammar. Moreover, it also aimed to identify the types of merger operations that occur within different constituents of the Punjabi language during the formation of yes-no questions. Additionally, it aimed to ascertain whether there is any wh-movement from the argument position to the complementizer position in Punjabi, similar to the pattern observed in English. Furthermore, the study analysed the distinctions in the formation of both yes-no questions and wh-questions between Punjabi and English languages.

**Problem Statement**

Languages have unique features that define them, leading to universal grammar (UG) exploring common traits across languages. Some researchers proposed UG, while others critiqued its validity due to extensive diversity among languages. Despite variations, South Asian languages, such as Punjabi and Urdu share syntactic features that should be scrutinized separately. The current study compared interrogative structures in Punjabi and English language, focusing on two main types: yes-no questions and wh-questions. The research analysed wh-movement in Punjabi in both question types. By analysing generative grammar’s theoretical framework and empirical data, the study aimed to identify merger operations within Punjabi constituents during yes-no question formation. It also investigated the potential wh-movement from argument to complementiser positions, akin to English patterns. By unravelling the deep structural changes underlying question formation in Punjabi, the current research contributed to the understanding of language universals, syntactic variations, and the applicability of generative grammar principles.

**Research Questions**

1. What kind of merger operations take place in different constituents of Punjabi language when a yes-no question is formed?
2. Is there any wh-movement from the argument position to the complementize position in Punjabi language as it happens in English?
3. What is the difference between the formation of yes-no questions and wh-questions in the Punjabi language?
Literature Review

The Minimalist Program (MP) and Universal Grammar (UG) Principles

MP provides a minimal theoretical and descriptive tool to illustrate all possible human languages (Freidin & Lasnik, 2011; Chomsky, 1993, 1995; Lasnik, 2002; Ott, 2019; Zwart, 1998). MP proposes a theory of UG which presupposes that human beings possess a biological feature of language faculty that incorporates a finite set of universal principles and parameters capable of producing infinite structures (Roberts, 2019). This faculty helps the children to build an ability in order to achieve grammatical knowledge of their language (Chomsky et al., 2019). The syntactic structures and constraints on them are governed by the principles. These principles seek to describe the universal aspects in human languages and the parameters describe the variation among different human languages. Two major universal principles are headedness and binarity (Radford, 2009). Headedness refers to the property of a constituent which means that every constituent must possess a head, whereas binary is a syntactic principle which means that every constituent consists of two branches (Khan et al., 2019). These principles imply that all grammatical structures are formed by binary merger operations and maximal projections achieved by these merger operations are the projection of one headword. These principles are universal as they govern grammatical operations in all human languages. Along with these universal principles, UG sets the parameters on which languages may vary from one another. For instance, in English and Punjabi, syntactic structures are formed by binary merger operations and the resultant structures are the projection of headwords. However, both languages may differ in the positions of heads. In English, a headword comes before its complement, but in Punjabi, a headword usually comes after its complement. Owing to this reason, a minimalist description of the language sets some parameters, which are also binary in nature, that is, a language may be a head-first language or a head-last language (Radford, 2009). In this way, the minimalist program fulfils the criterion of universality by describing all human languages under binary principles and binary parameters.

In order to fulfil the criterion of minimal adequacy of grammar, Chomsky (1993, 1995) introduced the MP, which liberated grammar from a complex descriptive apparatus by introducing a minimalist apparatus for
grammatical description. Chomsky (1995) applied this idea and suggested that an EPP (Extended Projection Principle: A finite T constituent must be extended into a TP containing a subject) feature is the mechanism that compels wh-expressions to the spec-CP position (Chomsky, 1982). To elaborate this feature, he maintained that just as T in finite clauses contains an EPP feature requiring it to be extended into a TP projection containing a subject as its specifier, C in wh-questions also carries an EPP feature requiring it to be extended into a CP projection containing a wh-expression as its specifier, as noted by Landau (2007). Since UG principles must govern the grammar of all possible human languages, different languages have been subjected to the scrutiny of the MP.

**Figure 1**

*Transformational Rules*

![Transformational Rules Diagram](image-url)

*Note*: Transformational Rules. (Carnie, 2013)
Development of Punjabi Grammar Studies

South Asian languages are no exception in this regard. Nayudu (2008) addressed syntactic issues in Marathi language by applying a minimalist framework. Kiani et al. (2011) applied this framework to study the syntax of complex predicates in Urdu. In this study, issues in other languages such as Gojri and Punjabi were briefly touched upon; however, these languages were not analysed in detail. Punjabi, being the 9th most widely spoken language in the world, still requires a syntactic description that aligns with the current syntactic theory (Eberhard et al., 2019).

With the establishment of Punjabi University in 1962, serious academic work on Punjabi began to take shape. Harjeet Singh Gill and HA Gleason Jr.’s A Reference Grammar of Punjabi (1969) was a pioneering effort in Punjabi teaching. This was followed by Christopher Shackle’s Teach Yourself Punjabi (1976), Tej Bhatia's Punjabi: A Cognitive-descriptive Grammar (1993), and Mangat Bhardwaj’s Punjabi: A Comprehensive Grammar (2016). Shackle (2017) asserted that Indian Punjabi, which is officially recognised, is considered the standard description of this language. Although, it shares mutual intelligibility with Urdu and Hindi, it is historically different from them due to its preservation of Middle Indo-Aryan (MIA) doubled consonants following a short vowel. For instance, Sanskrit ‘akshi’ (meaning ‘eye’) becomes MIA ‘akkhi’ and Punjabi ‘akkh’, differing from Urdu-Hindi’s ‘Aankh’. The most distinctive characteristic of Standard Punjabi is the realization of historical voiced aspirations as tones. For instance, the Hindi-Urdu word ‘ghora’ (meaning ‘horse’) becomes ‘k’òra’ in Punjabi (with glottal constriction and low-rising tone), and Hindi-Urdu ‘rah’ (meaning ‘way’) becomes Punjabi ‘rá’ (with a high-falling tone).

Modern Punjabi grammar addresses colloquial and cultural aspects of the language, providing valuable pragmatic and sociocultural insights. For instance, Bhardwaj et al. (2012), in his description of Punjabi Grammar, observed that the word order in Punjabi language is not rigidly fixed like in English. A Punjabi speaker or writer enjoys considerable freedom in placing words within an utterance. However, this does not imply that any word can be placed anywhere in a Punjabi sentence. In a Punjabi utterance, a verb is placed at the end and an adjective usually precedes the noun it modifies, similar to English. In spoken Punjabi, a yes/no question can be formed simply by changing one’s intonation. There is no need to place the verb
before the subject as is required in English. For instance, ‘Sab khariat ai?’ (Is everything fine?) (p. 28). Bhardwaj’s comparative analysis with English primarily focuses on the colloquial aspects of the language and gives prominence to the spoken form. However, his assertion that a Punjabi speaker enjoys more freedom as compared to other languages like English, requires further investigation, as this claim is not supported by other modern grammarians of Punjabi, such as Bhattia and Maan.

Research in Punjabi Syntax

Although, research on Punjabi syntactic features is limited, there are some studies available. Khan and Kausar (2019) compared the linguistic properties of Punjabi and English interrogatives by using a minimalist approach proposed by Chomsky (2008). It was argued that UG principles can reveal both, universal aspects and parametric variations while focusing to construct maximal TP projections in both languages and the selected clause structures are analysed by using UG principles, highlighting language-specific characteristics. In another study, Abdul Rafay Khan and Ghazala Kausar again conducted a comprehensive analysis of case valuation in Punjabi and English syntax (Khan & Kausar, 2021), exploring how cases are marked on subjects and objects in the ergative-absolutive and nominative-accusative alignment systems of transitive clauses. Emphasizing the Strong Minimalist Thesis and feature valuation mechanisms, their study concluded that in split ergative languages, such as Punjabi, subjects receive the ergative case through functional heads, while objects are valued accusative case by the same functional head through agree operation. Sharma and Mittal (2019) conducted a study on the syntactic analysis of complex sentences with participles in the Punjabi language. An algorithm was developed to detect and correct the syntactic errors in Punjabi participial-type complex sentences. The algorithm identifies and separates the dependent and independent clauses, detects grammatical mistakes, and corrects them by using Punjabi language rules. However, more studies are necessary to expand the existing knowledge of Punjabi syntax.

Methodology and Theoretical Framework

The current study used comparative linguistic analysis to investigate the formation of different types of questions in the Punjabi language. This
research design integrated the data collection, linguistic analysis, and theoretical interpretation.

Data Collection

For the analysis, the sentences common in all Punjabi dialects were used including Standard Punjabi, the language used in academic publications in Pakistan. Therefore, the data could be considered sourced from Punjabi authentic linguistic sources. A diverse range of question sentence structures was included to ensure comprehensive coverage.

Data Analysis

The analysis involved two main steps including the identification of the syntactic structures and analysing the movement operations. For the first research question, syntactic structures in both, yes-no questions and wh-questions were identified. The second research question was addressed by examining whether there is any evidence of wh-movement from the argument positioned to the complementiser position in Punjabi. Lastly, the third research question was explored by comparing the syntactic features and movement patterns in yes-no questions and wh-questions in Punjabi and English language.

Theoretical Framework

The framework of analysis was derived from Radford (2009) who applied Chomsky’s minimalist approach to describe the English syntax. His framework of analysis is based on the principles and parameters of UG. It seeks to abstract the general principles of constituent structures underlying the grammar of all human languages. Two major principles are Headedness and Binarity. The former means that every syntactic structure is a projection of a headword, and later that every syntactic structure is a binary branching.

According to the minimalist program, clauses and sentences are formed by the same binary merger operations as phrases as shown by binary branching at each level and the whole structure is the projection of complementizer phrase (CP) that which is the headword of CP. The structure of the whole clause is divided into binary branching at all levels and the whole structure can be seen as the projection of auxiliary are. The reason to introduce intermediate projection (T-bar) is that the merger of auxiliary is with VP does not provide a grammatically complete structure;
therefore, it can’t be labelled as complete TP. In this situation, T-bar merges with Pronoun ‘we’ to form the maximal projection TP.

Figure 2
Complementiser Phrase (CP)

Note. Complementiser Phrase (CP) (Radford, 2009)

Extending the analysis of such clauses/sentences which do not contain a CP, the minimalist approach presupposes that all such clauses must have a null complementizer as the force of a clause is determined by a complementizer. Since all structures in language are not formed by merger operations. There are structures which demand movement operations as well. The current research has also taken into account the movement operations if they are involved in the formation of some particular CPs.

In contrast to the taxonomic approach adopted by traditional grammar, Chomsky adopted a cognitive approach by suggesting that the goal of a linguist is to determine the knowledge of a speaker about his/her native language which makes him speak and understand a particular language. By this knowledge, Chomsky meant the competence of a native speaker in
his/her native language. Chomsky (1982) views that studying the grammatical competence of a speaker’s language refers to the study of the internalized linguistic system or I-language (as Chomsky terms it). This cognitive approach governs the task of a linguist who is concerned with describing and developing the grammar of a particular I-language. Chomsky’s ultimate aim was to develop a theory of UG which he defined as “the theory of human I-languages …which identifies the I-languages that are humanly accessible under normal conditions” (p. 23). This theory of UG informs the defining features of the grammar of all human I-languages.

Radford (2009) enlisted the criteria of adequacy which must be fulfilled by the theory of UG. The first of these criteria is universality which implies that universal grammar must provide adequate tools for the description and explanation of each and every human language. It would be universal if it enabled us to describe every possible human language. Secondly, the theory of UG must be maximally constrained; that is, its apparatus should be enough to describe only the grammar of a natural language and must not be capable of explaining or describing any other system of communication. Thirdly, it should provide us with minimal theoretical and descriptive apparatus to describe a particular human language. It implies that the grammar of a language must be as simple as possible. This aspect of UG led Chomsky to introduce MP for linguistics which aimed to make grammatical description as simple as possible. Lastly, the apparatus provided by UG should be easily learnable for a child.

Analysis and Discussion

Like other languages, such as English, Urdu or Hindi, Punjabi has a range of question sentences. There are many ways to express questions in Punjabi language, for instance, yes-no questions, wh-questions, tag questions, and indirect questions. (Mann et al., 2011). Following are some common ways of forming questions in Punjabi language:

a. Yes-no Questions

Bhatia (1993) divided yes-no questions in Punjabi language into two basic types: leading yes-no questions where answer is expected in an affirmative or negative way, and neutral questions when any particular answer is not expected by adding kii (Q-wh) generally in front position.
1a.  kii   ajj   barish   hovegi?
(Q-wh) today rain happen/fall.Fut.F.Sg.
Will it rain today? (Neutral Question)

1b.  ajj   tusi  aaoge  na?
today you.hon come-fut.2p neg
‘You will come today, won’t you?’  (Tag Question)

1a. kii barish hovigi ajj?

The expected answers in such sentences are generally positive. However, if the expecting answer is negative, a negative naii is added with already existing na. Moreover, sometimes a positive polarity item, such as Khary/pálaa/thoRe is added to form a negative sentence.

2a.  ajj   Salman nahii   aaega,  na?
today  M   neg   come-Fut.M.Sg   neg
‘Salman will not come today, will he?’ (Tag Question)

2b.  ò   pálaa  aandaa   ae?
he well (interj.) come PRES.M.SG is
‘Does he (ever) come?’ (Yes-no Question with Positive Polarity)
b. Wh-Questions

Wh-questions, also known as question words start with a wh-question, such as what, when, why, and where. In Punjabi, wh-questions are termed as *k*-questions because generally, they all begin with a *k* sound. The *k*-questions in Punjabi are similar to those in English, such as *kii* (what), *kinj* (how) (manner adverbial), *kThy/kadder* (where), and *kadon* (when); however, unlike English, no word order change takes place while forming any of such *k*-questions (Bhatia, 1993; Khan et al., 2019). The other common *k*-questions are *kDaan/kiven* (how) (greeting), *kinna* (how much), *kon* (who), *kinno* (whom), *kehRa* (which), and *kiojiya* (what kind). The question words are often stressed in question sentences.

3a. tuhaḍa nàa kii ai?
   your.Neut.Sg name what is
   ‘What is your name?’

3b. lahore kadoN ñëega?
   Lahore when come.M.Fut
   ‘When will Lahore be reached?’
3c. *eh khat kinnei likhiya ae?*

‘Who has written this letter?’

c) *eh khat kinnei likhiya ae?*

Two question words, that is, *kii* and *kauN* have the capacity to get a full range of case relations through a postposition addition. More significantly, this exists in oblique form.

**Table 1**

*Case Marker with Q-words in Punjabi*

<table>
<thead>
<tr>
<th>Case</th>
<th>Q-word.Sg</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ergative</td>
<td>ne</td>
<td>Kii</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kinnei</td>
</tr>
<tr>
<td></td>
<td></td>
<td>who</td>
</tr>
<tr>
<td>Accusative</td>
<td>no</td>
<td>Kii</td>
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<tr>
<td></td>
<td></td>
<td>kinnu:</td>
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<tr>
<td></td>
<td></td>
<td>whom</td>
</tr>
<tr>
<td>Instrumental</td>
<td>nal</td>
<td>Kii</td>
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<td></td>
<td></td>
<td>kisna:l</td>
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<tr>
<td></td>
<td></td>
<td>with which</td>
</tr>
<tr>
<td>Genitive</td>
<td>d</td>
<td>Kii</td>
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<td></td>
<td></td>
<td>kisdi</td>
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<td></td>
<td></td>
<td>whose</td>
</tr>
<tr>
<td>Locative</td>
<td>tak, ty</td>
<td>Kii</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kistak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to which</td>
</tr>
</tbody>
</table>
4a. tusi kindy=na:l rehndy ho?

‘Whom do you live with?’

4b. dʒamal=ne kinnu: kinnu: sadiya ae?
‘To whom have Jamal invited?’

**Discussion**

Chomsky's Theory of Universal Grammar (UG) (1993, 1995) has been a cornerstone in linguistics. It offers understanding of humans’ innate linguistic capacity and the underlying principles that shape the grammatical structures of languages. UG provides universal principles that are applicable to all human languages and acknowledges the potential for variation across languages, captured through parameters. The current study used MP as a theoretical framework to explore and compare the structures of interrogative sentences in Punjabi and English language. By focusing on the similarities and differences between these languages, this discussion sought
to unveil insights into the universality of linguistic principles while also recognizing language-specific characteristics.

Punjabi, like many other languages, has multiple ways to form questions, showcasing its linguistic diversity (Mann et al., 2011). The current study focused on two types of interrogative sentences in Punjabi: yes-no questions and wh-questions, known as $k$-questions in Punjabi. These types of questions are fundamental structures which are present in multiple languages, enabling cross-linguistic analysis.

The findings revealed that, unlike English, interrogative sentences in Punjabi do not require obligatory movement. Wh-movement of auxiliaries or other words is often observed in the formation of questions in English. The analysis shows that neither yes-no questions nor wh-questions require obligatory movement in Punjabi. This highlights the efficiency of syntactic operations in Punjabi interrogatives under minimalist analysis. The structure of Punjabi interrogatives aligns with Chomsky’s Universal Grammar (1993, 1995) theory by not requiring obligatory movement. This observation suggests that the structural features of interrogative sentences in Punjabi can be successfully described by using minimalist principles. The study also acknowledged that linguistic variation is inherent within UG’s framework. While, Punjabi and English share similar principles in interrogative sentence formation, the specific ways in which these principles manifest highlight the unique characteristics of each language.

Implications and Conclusion

The exploration of Punjabi interrogative sentences through the lens of MP offers valuable insights into the underlying syntactic structures of these constructions. This analysis not only validates Punjabi’s alignment with UG (UG) principles; however, it also enhances the comprehension of language-specific variations in forming the questions. The current study served as a foundation for unravelling the intricate interplay between linguistic universals and language-specific traits, thereby illuminating the mechanisms that mould human language across diverse cultural and linguistic contexts. Future research may extend this comparative analysis to encompass additional languages, broadening the scope to investigate the applicability of UG principles and the myriad ways in which languages demonstrate structural diversity. Applying the minimalist syntactic analysis to the collected data highlights how both Punjabi and English clauses adhere
to UG’s binarity, headedness, and extended projection principles, a stance also supported by Khan et al. (2019). However, these languages exhibit certain parametric deviations. Notably, like English, Punjabi showcases a variety of interrogative types, including yes-no questions and wh-questions. Yet, the process of forming interrogatives diverges notably between the two languages. Specifically, in Punjabi interrogative clauses, there is no obligatory movement observed for any constituent, unlike in English. Neither wh-expressions nor auxiliaries undergo movement in Punjabi interrogatives and the overall word order remains unaltered by the interrogative structure. In contrast, English allows for the movement of both wh-expressions and auxiliaries from their original positions. This difference is further emphasized by the fact that Punjabi auxiliary heads typically occupy the final positions in clauses, increasing the likelihood of split projections in Punjabi as compared to English. A comprehensive examination of these features within the dataset requires a more exhaustive analysis that delves deeper into the specifics of each linguistic structure.

References


