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The Syntax of Ad-Positional Phrases in English and Urdu: Insights from X-Bar Theory and Theta Criterion



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Abstract

The present research work compares English and Urdu adpositional phrases (AdPs) through the light of X-bar theory and Theta Criterion. X-bar theory which is a component of generative grammar encompasses a bar-level structure where every phrase is built around a head and where particular projections (maximal, intermediate and minimal) are well defined by syntactic principles. Integral to this theory is the Theta Criterion which guarantees that a particular argument in the sentence does not occupy more than a single theta role, which its semantic relationship with the head. The present research is limited strictly to the adpositional phrases in both languages (realised as prepositional phrases in English and postpositional phrases in Urdu) in an effort to understand the differences in their phrasal projections, argument-head relation, and conformity to the Theta Criterion. The study also shows the similarities and differences in the structural organization, theta-role assignment, and differences in case systems, agreement and null arguments. The result of this research extends the analysis of X-bar theory and the Theta Criterion in operation to these syntax differences, and provides further understanding of the structural features of these two languages. The study, therefore, re-echoes the need to combine syntactic analysis with morphology, semantics and pragmatics in order to have an all rounded approach to cross-linguistic differences in AdPs.

Keywords: Ad-Positional Phrases, Phrasal Projection, Argument-head Relation, Theta Criterion

Introduction

This research investigates the syntactic structures of prepositional phrases in English and Urdu through the theoretical lens of X-bar theory and the Theta Criterion. According to X-bar theory, which Chomsky (1970) developed, the generative grammar system establishes formal principles for understanding phrase hierarchical structures. Every phrase consists of a fundamental head element that functions with specifiers and complements and adjuncts which enable systematic analysis of sentence structure. The Theta Criterion (Chomsky, 1981) guarantees that each sentence argument receives a single semantic role from a well edined set of roles that

includes agent, theme or goal thus connecting syntactic arrangements to semantic interpretation.

Urdu together with English share configurational status yet demonstrate substantial syntactic irregularities between their constructions. The difference in word structure between English SVO patterns and Urdus SOV pattern in both the natural languages exposes specific restrictions for preposition order and thematic role assignment. The word order of English requires its prepositions to appear before their objects ("in the room") but Urdu positions its postposition elements after the objects ("kamray mein"). The fundamental structural variation between these patterns requires thorough examination within the context of X-bar theory and the Theta Criterion.

Many studies in English and rare studies in Urdu focus heavily on syntax through prepositional phrases which show relationships that span both space and time and abstract dimensions. Both languages require detailed investigation of their argument-head relationships along with word order patterns and case marking mechanisms and agreement systems and null argument distribution. English and Urdu show significant differences in their head-complement structural patterns particularly when analyzed using case systems and thematic role assignment methods. The research investigates these language variations by expanding previous studies by Butt (1993) and Haider (2012) and includes broader linguistic frameworks from morphology and pragmatics.

The present research work combines syntactic theory with empirical data to examine English and Urdu syntactic structures and their universal principles integration. The research examines both the foundational universal grammar system shared by languages and the distinctive features that exist at the surface level between English and Urdu. The dual approach toward comparison between syntactic systems adds depth to the field of comparative syntax by showing how theoretical frameworks function in different linguistic structures. The research conducts an analysis to demonstrate the theoretical foundation of language structure by assessing how X-bar theory and the Theta Criterion explain syntactic diversity and coherence.

This research examines fundamental questions regarding prepositional phrase placement affected by word order in both languages as well as how tense and aspect

influence thematic roles particularly in Urdu. The study combines essential elements of generative grammar theory and empirical data to extend the research established by Butt (1993) and Haider (2012) with comprehensive analyses of English and Urdu syntactic structures. Through the combination of the X-bar schema with the Theta Criterion researchers gain tools to study how specifiers function together with heads and complements to identify thematic roles. When the verb "gave" appears in "John gave Mary a book", it assigns "Mary" (as recipient) and "book" (as theme) to their thematic roles with "John" (agent) placed in the subject slot. These exercises demonstrate the systematic connection between syntax and semantics which Chomsky (1981) and Radford (2009) have emphasized.

This research explores the effect that Word Order differences between SVO English and SOV Urdu play on prepositional phrase placement and hierarchical organization throughout both languages. The research employs X-bar theory to examine the prepositional phrase structure of both languages across differing syntactic principles which demonstrate both similarities and deviations to universal rules.

The study evaluates tense and aspect in Urdu prepositional phrase thematic role assignment while examining linguistic differences between these constructions in Urdu compared to English. This research looks at the operational mechanism of the Theta Criterion in these languages to understand how the identification of thematic roles plays out while investigating the intersection of semantic and syntactic features in English and Urdu prepositional phrase evaluation.

The present work introduces a new research approach by comparing thematic roles and thematic role assignment in Urdu and English while implementing X-bar theory together with the Theta Criterion. This study builds upon previous research by applying thematic role assignment techniques to evaluate the entire spectrum of syntactic structures beyond plain noun and verb patterns. The research investigates language semantics and syntax between both English and Urdu to show universal deep structure principles together with language-specific surface forms. The study combines an exploration of general syntactic elements with an investigation of specific linguistic features which creates foundational ground for additional studies within comparative syntax and multilingual systems.

The thorough Urdu syntactic analysis guided both theoretical linguistic advancements

and practical multilingual use solutions for the field of linguistics. The combination of X-Bar Theory with Theta Criterion enables the research to detect refined patterns of argument structure alongside thematic role distribution patterns in Urdu which provide insights into its grammatical and syntactic features. Through the combination of the X-bar schema with the Theta Criterion, researchers gain tools to study how specifiers function together with heads and complements to identify thematic roles.

Literature Review

The present study examines how words join together into phrases and sentences provides fundamental insight into how grammar functions throughout different languages. Through an analysis of syntactic structures, comparative linguistics reveals basic principles which apply across languages as well as particular linguistic differences. The present study analyzes prepositional phrases from both English and Urdu using X-bar theory and the Theta Criterion to reveal how prepositional structures organize syntax and assign meaning to sentence components. Research demonstrates both the flexibility of universal grammar models alongside the identification of research gaps in South Asian language studies by examining English's head-initial structure with Urdu's head-final configuration.

Syntax in Comparative Linguistics

According to Radford (2004, p.1) syntax represents how words organize together to form phrases and sentences for understanding grammatical structures among different language systems. Classic syntactic study involved sorting individual grammatical elements like nouns and verbs into separate categories. The traditional method failed to provide sufficient explanatory detail for understanding both language acquisition and comprehension mechanisms. Under the direction of Chomsky *Universal Grammar* (1986) emerged from the cognitive revolution which showed that native speakers possess an inherent linguistic capacity. Syntactic structures occupy a foundational role according to Chomsky because they shape mental capacities beyond serving as mere descriptive devices. The new syntactic analysis method transitioned away from mere classification functions and towards investigating overarching principles that define language structure.

Within this theoretical approach, syntax functions as a bridge between mental concepts and their linguistic representations inspired by Pinker's (1994) research.

According to Adger (2003), syntactic structures function as organizational networks that support language production methods and comprehension systems by harmonizing different linguistic areas such as morphology together with semantics to pragmatics and phonology. Prepositional phrases show us how language framework structures spatial positions while also organizing time frames and non-concrete concepts. The analysis of sentence structures depends heavily on grammatical categories and phrase structure rules and tree diagrams which help interpret how prepositional phrases transform lists of words into unified statements.

Theoretical Foundations of X-bar Theory and Theta Criterion

X-bar theory developed by Chomsky in 1970 establishes a general hierarchical system which language experts use to examine different kinds of phrases while making way to understand prepositional phrases as well. According to X-bar theory, every phrase consists of three elements: a mandatory head and complement and then specifiers or adjuncts which can be optionally attached following a cross-linguistic standard structure. Within prepositional phrases, the preposition operates as the head by controlling how the complement functions with respects to the overall phrase's semantic meaning. Within the English prepositional phrase "on the table" the head element is "on" with "the table" serving as the complement. The configuration of this system follows X-bar schema guidelines to facilitate structured syntactic evaluation.

As a fundamental aspect of Chomsky's syntactic model, the *Theta Criterion* works with X-bar theory to create a defined link between syntactic arguments and their theta roles (Chomsky, 1981). When analyzing prepositional phrases, one can see that the theta role emerges from the complement through prepositions which act to determine locative or directional functions. Through strict alignment between components, this structure achieves both grammatical correctness alongside semantic unity. This phrase would be both incomplete and ungrammatical whenever the prepositional complement "on" is omitted. Analysis of prepositional phrases across English and Urdu relies significantly on the functions of the Theta Criterion because it controls argument-predicate relationships.

Adpositional Phrases (AdPs) Realised as Prepositional Phrases (PPs) in English and Postpositional Phrases (PostPs) in Urdu Syntax

English and Urdu exhibit fundamental differences in the syntactic structure of

prepositional phrases. English uses prepositions leading before their complements through its head-initial linguistic construct. The word "in" functions as a preposition which governs its complement "the room" in the phrase "in the room". In compliance with X-bar theory universal principles, the head-initial structure achieves theta roles at clear assignment points.

Contrary to this, the structure of postpositional phrases in Urdu positions complements before their governing postpositions maintaining a head-final arrangement. For instance, the equivalent phrase in Urdu, "kamray mein" (in the room), places the complement "kamray" (room) before the postposition "mein" (in). The Urdu language demonstrates good syntactic adaptability while still observing basic universal grammar standards. Both languages systematically implement theta roles even though their structural elements exhibit clear distinctions. Through their position as syntactic heads prepositions or postpositions establish roles including locative temporal or directional which the complement fills and creates semantic unity.

Role of Theta Criterion in Prepositional Phrases

The Theta Criterion holds an essential position in examining how prepositional phrases construct meaning and structure. Every argument in a phrase obtains a distinct theta role like *agent or theme* but merely one such unique role applies to each argument. The preposition "under" in the phrase "under the bed" designates its complement "the bed" with a locative semantic role. The phrase maintains grammatical and semantic correctness through its one-to-one theta role correspondence.

The Theta Criterion functions equivalently in Urdu though it adjusts to match the language's head-final syntax. The phrase "palang ke neeche" (under the bed) shows how "ke neeche" functions as a postposition that gives a locative meaning to "palang." The fundamental mechanism of theta role allocation functions identically despite structural differences between this language system and English syntax. The Theta Criterion shows universal application throughout languages because it functions consistently even among different syntactic configurations.

Hierarchical Structure in Adpositional Phrases and Studies in Pakistani Context X-bar theory explains the syntax organization within adpositional phrases that shows how languages build their structural representations which encode meaning. Within

English sentence structure, the preposition heads a syntactic arrangement where the complement becomes its dependent unit. The prepositional phrase needs to function within grammatical structures alongside semantic guidelines through its prescribed configuration. The prepositional head "behind" creates a spatial connection between itself and its complement "the curtain" in the English prepositional phrase, "behind the curtain".

Despite specializing in head-final order, the syntax of the postpositions in Urdu follows the same structural principles. In the expression "parday ke peechay" (behind the curtain), the grammatical role of head falls to the postposition "ke peechay" which governs the complement noun "parday" (curtain). Languages worldwide show how the parameters of X-bar theory function when mapping their syntactic forms.

One very influentioal study, A Comparative Analysis of Syntactic Structures in English and Urdu: Insights through X-bar Theory and the Theta Criterion in this regard has already been conducted by Arshad et al, (2024). The syntactic structure of ad-positional phrases in English and Urdu can be effectively analyzed through X-Bar Theory and the Theta Criterion, offering insights into phrase structure and thematic role assignment (Ishtiaq & Gill, 2024). Studies on parallel linguistic structures highlight syntactic variations across languages (Ishtiaq et al., 2022). Urdu-English transliteration has been identified as a major factor affecting pronunciation and syntactic transfer (Ishtiaq et al., 2022). Discourse analysis further explores syntactic patterns and linguistic representations (Gill et al., 2025). The impact of punctuation on sentence structure and clarity has been examined in Pakistani university students' writings (Ali et al., 2020). Additionally, studies on gender representation in linguistic discourse highlight structural and semantic differences in English (Ishtiaq et al., 2021). Research on nonverbal elements in conversation analysis underscores the interplay between syntax and pragmatics (Ali et al., 2019). Pedagogical perspectives emphasize code-switching's role in syntactic development (Ali et al., 2021). Comparative stylistic analyses contribute to understanding cross-linguistic syntactic differences (Majid, 2019). The syntactic density of Quranic translations provides insight into semantic structuring (Ishtiaq et al., 2021). Textbook content analysis also highlights structural variations (Majid et al.). Further studies explore the role of native-like

idiomatic expressions in language proficiency (Ali et al., 2019). The characterization of linguistic structures in Arabic and English provides comparative insights (Ali et al., 2018). Effective use of linguistic principles in communication has also been analyzed (Ali et al., 2019). Perceptions of British and American English impact syntactic preferences among learners (Ali et al., 2020). Finally, systemic functional grammar has been employed to examine linguistic structures in literary discourse (Ishtiaq et al., 2021). Collectively, these studies contribute to a deeper understanding of adpositional phrase constructions in English and Urdu.

Comparative Insights and Applications

Through the unified principles of X-bar theory and Theta Criterion, readers and scholars can obtain a powerful mechanism to examine the syntactic structures of prepositional phrases in English together with Urdu. The structural head-order patterns in both English and Urdu languages and their respective linguistic structures of adpositions demonstrate syntactic diversity among world languages by showing initial and final positioning of heads respectively. Despite these differences, both languages adhere to the universal principles of hierarchical phrase organization and theta role assignment. Through this comparative study, X-bar theory demonstrates its ability to support multiple language structures without abandoning its essential theoretical base.

This analysis demonstrates practical outcomes for multiple disciplines such as language instruction and machine translation algorithm development. Machine translation systems gain greater accuracy when analysts recognize structural pattern variations found within adpositional phrases across syntactically unique languages such as English and Urdu. This research extends knowledge in comparative linguistics by identifying common syntactic rules and particular language features which increases one's perspective on language organization and meaning conveying mechanisms.

Addressing Gaps in Research

Although X-bar theory and the Theta Criterion receive extensive application across various languages their deployment for prepositional phrase analysis of South Asian languages including Urdu shows limited usage. Butt and King (2003) yield important understanding of Urdu syntactic structures through their examination of complex

predicates even though they leave postpositional phrases largely unexamined. This research intends to bridge existing research deficiencies by using known theoretical frameworks to study prepositional phrases within English and their equivalents or counterparts in Urdu, i.e. postpositional phrases through comparative analysis. This analysis simultaneously broadens X-bar theory alongside the Theta Criterion and delivers novel insights into how Chomsky's universal grammar principles interacts with Urdu syntax.

This investigation reveals English and Urdu adpositional phrases conform to universal syntactic regulations and display particular language-specific distinctions. This study advances comparative linguistics through its integration of theoretical insights together with empirical data which provides a complex analysis of the syntactic structures found in English and Urdu. The research creates new understanding of syntax-semantics connections through X-bar theory and Theta Criterion studies thus establishing foundations for upcoming work in computational and multilingual linguistics.

Research Methodology

This section outlines the processes employed to fulfill the purpose of this study, as well as the research's philosophical premise. The study adopts a qualitative research approach, utilizing a comparative linguistic research method to analyze the syntax of prepositional phrases (PPs) in English and Urdu. The analysis is grounded in two theoretical frameworks of generative grammar: X-Bar Theory and the Theta Criterion. The data for this study was collected from natural language examples of prepositional phrases within the Generative Tradition of Urdu and English grammar texts. Applying X-Bar Theory, the syntactic formations of prepositional phrases in both languages were described and classified. Theta Criterion was used to analyze how roles such as locative, directional, and temporal are mapped onto the syntactic structures of prepositional phrases in both languages. The analysis highlighted syntactic parallelisms and divergences to shed light on the structural variation of prepositional phrases in English and Urdu.

A cross-comparison of prepositions and postpositions in English and Urdu was conducted to ascertain their syntactic affinities and differences. Methodological tools such as tree diagrams were employed to illustrate the hierarchical syntactic structures

of prepositional phrases in both languages, enabling their analysis based on X-Bar Theory and the Theta Criterion.

The data analysis procedure involved a structural analysis wherein X-Bar Theory was applied to deconstruct prepositional phrases into their syntactic constituents. This was followed by theta role assignment to determine and contrast the thematic roles assigned within prepositional phrases. Finally, a comparative analysis focused on identifying and interpreting the syntactic differences between English and Urdu prepositional phrases at the phrasal level, with a view to their typological characteristics.

Data Analysis

Comparison of Prepositional Phrases (PPs) in English and Urdu using X-Bar Theory

X-Bar theory, an essential component of generative grammar, provides a universal framework to analyze syntactic structures in natural languages. While the theory remains universal, its application varies across languages due to differences in syntactic properties. This analysis examines Adpositional Phrases (AdpPs) in English (PPs) and Urdu (PostPs) under X-Bar theory, highlighting distinctions in hierarchical organization, word order, and phrase structure.

Prepositions in English

English prepositions invariably appear before the nouns they modify. For instance, in "near the book," the preposition "near" is positioned ahead of its complement "the book." This positioning adheres to the head-first nature of English phrases.

Postposition in Urdu.

In Urdu, the equivalent of "near the book" would be "پاس کے کتاب" (kitab ke paas), where "پاس" (paas), meaning "near," functions as a postposition. It follows the noun "پاس" (kitab) instead of preceding it, reflecting the head-final structure of Urdu phrases.

Head-First Structure in PPs in English.

In X-Bar terms, English follows a head-first configuration. The head of a phrase appears first, followed by its complement and, where applicable, specifier.

Example Phrase:

"near the book"

Structure: Preposition (near) + Noun Phrase (the book).

This arrangement exemplifies English's broader syntactic tendency, as seen in noun phrases (NPs), verb phrases (VPs), and other structures.

Implications of Head-First Structure in English

The head-first nature ensures linear readability, aligning with the left-to-right processing of English. This organization affects the interpretation of hierarchical relations in sentences, with heads taking precedence in determining the overall meaning of phrases.

Head-Last Structure in PostPs in Urdu

Urdu follows a head-last structure, consistent with its SOV word order. In X-Bar terms, the head appears after the specifier and complement.

Example Phrase:

"kitaab ke paas"

Structure: Noun (Oblique Case) + Postposition.

This structure contrasts with the head-first organization

Implications of Head-Last Structure in Urdu

The head-last arrangement aligns with Urdu's syntactic tendency to place primary elements (heads) after dependent elements. This affects processing and interpretation, requiring speakers to wait until the end of the phrase for full comprehension.

Case Marking in Urdu

Urdu employs postpositions instead of prepositions, with nouns typically marked for the oblique case.

Example Phrase:

"kitaab ke paas" (near the book)

Structure: Noun (kitaab, oblique case) + Case marker (ke) + Postposition (paas).

This case marking modifies the noun to indicate its relationship with the postposition, distinguishing Urdu's syntactic organization from English.

In Urdu, the concept of "near" is expressed through postpositions, which, as the name suggests, are placed after the noun they modify. This contrasts sharply with English, where prepositions always precede the noun.

Here's a breakdown of the Urdu phrase "پاس کے کتاب" (kitaab ke paas):

* kitaab: This is the noun, meaning "book."

* ke: This is a case marker, specifically the oblique case marker. It marks the noun "kitaab" as the object of the postposition. In essence, it signifies that the book is the entity that is "near" something.

* paas: This is the postposition, meaning "near." It follows the case-marked noun.

Key Differences from English:

* Position: In English, "near" would precede the noun ("near the book"). In Urdu, it follows.

* Case Marking: Urdu nouns often undergo case marking to indicate their grammatical role within a sentence. This is crucial for postpositional phrases, as it clarifies the relationship between the noun and the postposition.

* Syntactic Structure: This difference reflects the overall head-final nature of Urdu, where the head of a phrase (like the noun in this case) typically appears at the end.

While English utilizes prepositions to express spatial relationships, Urdu employs postpositions. This distinction highlights the diverse ways languages express grammatical relationships, with case marking playing a vital role in Urdu's syntactic structure.

X-Bar theory effectively accommodates the syntactic diversity between English and Urdu, despite their structural differences. English's SVO order and headfirst configuration position prepositions before nouns, creating linear, easily processable structures. In contrast, Urdu's SOV order and head-last organization rely on postpositions and case marking, emphasizing hierarchical relations at the end of phrases. These distinctions demonstrate the adaptability of X-Bar theory in analyzing cross-linguistic syntactic variations, underscoring universal principles alongside language-specific patterns.

The Comparison of PPs in English and Urdu Using Theta Criterion

The comparison of prepositional phrases (PPs) in English and Urdu, particularly through the lens of X-bar Theory and the Theta Criterion, allows for a deeper understanding of the syntactic and semantic roles that these structures play in each language. This analysis explores the syntactic structure of PPs in English and Urdu, their function in sentence construction, and their interaction with the Theta Criterion, which governs the assignment of thematic roles.

X-bar Theory and PPs in English and Urdu

X-bar Theory is a framework used to analyze the hierarchical structure of syntactic constituents in a sentence. According to this theory, each phrase (including PPs) consists of a head (usually a lexical item) and complements or adjuncts that provide additional information. The head of a PP is typically a preposition (in English) or a postposition (in Urdu), which determines the type of information the phrase conveys.

English Prepositional Phrases (PPs): In English, the preposition is typically placed before the noun phrase (NP) that it governs. This results in a structure like [P [NP]], where "P" is the preposition and "NP" is the noun phrase (e.g., "in the room," "on the table"). The PP functions as either an adjunct (providing additional information about the verb, subject, or object) or as a complement (necessary for the meaning of the verb).

Adjuncts: These PPs provide optional information, often describing the time, place, manner, or purpose of an action. For instance, in "She slept in the room," the PP "in the room" adds information about where the action of sleeping takes place.

Complements: A PP can serve as a complement, especially with verbs that require a preposition to complete their meaning. For example, in "She is interested in art," the PP "in art" functions as a complement because the verb "interested" requires the preposition "in" to specify what the subject is interested in.

The structure in X-bar theory would be:

 $PP \rightarrow [P] [NP]$

 $P \rightarrow$ Preposition (e.g., in, on, with)

 $NP \rightarrow Noun Phrase (e.g., the room, in art)$

Urdu Prepositional Phrases (PPs): Urdu, in contrast to English, is a SOV (Subject-Object-Verb) language, and this syntactic difference affects the positioning of PPs. In Urdu, the postposition (equivalent to a preposition in English) follows the noun phrase it governs. Hence, the typical structure of a PP in Urdu is [NP [P]], where the NP precedes the postposition.

For Example:

"میں کتاب" (in the book) "میں کتاب" میں کمرے" (in the room) "میں باز ار

In these examples, the postposition "ميں" (in) comes after the noun (e.g., "كتاب – book). Urdu PPs are flexible and can indicate various roles such as location, time, direction, manner, and cause.

Adjuncts in Urdu: Like in English, PPs in Urdu can function as adjuncts. For example, in "سويا ميں كمرے ميں" (I slept in the room), the PP "ميں كمرے" (in the room) provides extra information about where the action of sleeping occurred.

Complements in Urdu: PPs in Urdu can also serve as complements to certain verbs. For example, in "میں کتاب نے میں" (I wrote in the book), the PP "میں کتاب نے میں" (in the book) is necessary to complete the meaning of the verb "الکھنا" (to write).

The structure in X-bar theory would be:

 $PP \rightarrow [NP] [P]$

NP \rightarrow Noun Phrase (e.g., کمره – book, کمره – room)

 $P \rightarrow Postposition (e.g., میں - in, - from)$

Theta Criterion and Role Assignment in English and Urdu

The Theta Criterion is a principle in syntactic theory that governs how verbs assign thematic roles (or theta roles) to the arguments (e.g., subject, object, adjuncts) in a sentence. These thematic roles are essential for the semantic interpretation of a sentence. The argument structure of a verb dictates what kind of roles it assigns to its arguments.

Theta Roles in English: In English, theta roles are typically determined by the verb, and the prepositional phrase (PP) plays a crucial role in specifying the relationship between the verb and its arguments. The core thematic roles that are usually assigned include Agent, Theme, Goal, Source, and Instrument.

Agent: The entity that performs the action (e.g., in "She hit the ball with a bat," "she" is the Agent).

Theme: The entity that is affected by or undergoes the action (e.g., in "She hit the ball," "ball" is the Theme).

Goal: The destination or recipient of an action (e.g., in "She gave a book to John," "John" is the Goal).

Source: The origin of an action (e.g., in "She took the book from the shelf," "shelf" is the Source).

Instrument: The means by which the action is performed (e.g., in "She cut the paper

with scissors," "scissors" is the Instrument).

In the sentence "She gave a book to John," the verb "gave" assigns a Theme role to "book," a Goal role to "John," and an Agent role to "She." The PP "to John" assigns the Goal role to the NP "John," identifying the recipient of the action.

Theta Roles in Urdu: In Urdu, the assignment of theta roles is also verb-dependent, but the postpositions significantly influence the interpretation of the sentence. The same thematic roles that exist in English (Agent, Theme, Goal, etc.) are applicable in Urdu as well, but they are expressed through different syntactic structures.

Agent: The doer of the action is typically the subject of the sentence. In "کتاب نے میں (I read the book), "بڑ ها

Theme: The entity affected by the action is usually the object in the sentence. In "سیر (I read the book), "کتاب نے (book) is the Theme.

Goal: The recipient or destination of the action is marked by a postposition. For example, in "دى كو محمد كتاب نے ميں" (I gave the book to Muhammad), the PP "كو محمد" (to Muhammad) assigns the Goal role to "Muhammad."

Instrument: In "لکھی سے قلم کتاب نے میں" (I wrote the book with a pen), the PP "سے قلم" (with a pen) assigns the Instrument role to "pen."

The flexibility of Urdu postpositions allows for the dynamic interpretation of thematic roles based on sentence context. For example, the postposition "سنے" (with, from) can indicate Instrument, Source, or Cause, depending on the verb and overall meaning of the sentence.

Comparative Analysis of PPs in English and Urdu

Order and Placement of PPs:

In English, the preposition typically precedes the noun phrase (e.g., "in the room"), following a rigid SVO structure.

In Urdu, postpositions follow the noun phrase (e.g., "auu – in the room), adhering to the SOV structure. This syntactic difference significantly impacts sentence construction and the way thematic roles are assigned.

Role Assignment

In both languages, verbs assign thematic roles, but the role assignment in English is generally more fixed. In Urdu, the syntactic flexibility allows for a broader range of interpretations, with postpositions playing a crucial role in this flexibility.

For example, the verb "to go" in both languages assigns the Agent role to the subject, the Goal role to the destination, and the Source role to the starting point. However, the postposition in Urdu can shift depending on whether the emphasis is on the direction, location, or purpose of the action.

Examples of Thematic Role Shifting in Urdu

"ہڑھا سے کتاب" (read from the book) – Here, "سے" (from) indicates the Source

"بزریعے کے کتاب" (read through the book) – In this case, "ذریعے کے کتاب (through) indicates the Instrument role.

"پڑھا لیے کے کتاب" (read for the book) – The postposition "لیے کے کتاب (for) shifts the role to indicate purpose.

Flexibility of Postpositions in Urdu: Postpositions in Urdu are highly contextdependent. For instance, the same postposition can fulfill different thematic roles based on its syntactic position and the.

Discussion

The analysis of Prepositional Phrases (PPs) in English and Urdu through X-bar Theory and the Theta Criterion highlights distinct syntactic and semantic characteristics shaped by their underlying word orders and structural preferences. English, with its Subject-Verb-Object (SVO) order, adheres to a head-first configuration, where prepositions precede their complements, ensuring linear readability and clarity in thematic role assignment. In contrast, Urdu, following a Subject-Object-Verb (SOV) order, exhibits a head-last structure, where postpositions follow nouns, creating a syntax that emphasizes relationships after the primary elements.

The flexibility of Urdu's syntactic system is evident in its ability to assign multiple thematic roles to the same PP depending on context, postpositions, and verb aspect. For instance, "se" (with/from) can function as an instrument or source based on verb aspect (imperfective or perfective), a nuance absent in English due to its stricter theta role assignment. Additionally, Urdu's use of oblique case markings and postpositions, such as " $\[mu]$ (near the book), contrasts with English's reliance on prepositions, showcasing different mechanisms for expressing grammatical relations.

While both languages allow PPs to act as complements or adjuncts, their structural

realizations differ. English PPs typically follow the head they modify, creating a rigid and predictable pattern, whereas Urdu PPs often precede verbs, aligning with its SOV framework. This variation influences comprehension, with English favoring immediacy and Urdu requiring interpretation until the phrase's conclusion.

Overall, the comparison underscores the adaptability of X-bar Theory and the Theta Criterion in analyzing cross-linguistic syntactic variations. English demonstrates a structured, head-first approach, while Urdu's flexible, head-last organization allows for nuanced thematic roles and contextual versatility. This linguistic diversity enriches our understanding of universal syntactic principles and their application across distinct languages.

Conclusion

The comparative analysis of Prepositional Phrases (PPs) in English and Urdu using X-Bar Theory and the Theta Criterion reveals the intricate relationship between syntactic structures, thematic role assignment, and language-specific word order. By examining the syntactic and semantic features of PPs, it becomes clear that these two languages, while governed by universal grammatical principles, exhibit distinct patterns shaped by their unique syntactic preferences.

Key Differences in Syntactic Structures

English, with its Subject-Verb-Object (SVO) order, follows a head-first configuration, where heads such as prepositions precede their complements. This linear arrangement ensures clarity and ease of processing, especially in hierarchical structures. For instance, in phrases like "near the book," the preposition "near" introduces its complement, "the book," adhering to a predictable pattern. This consistency extends to larger syntactic units such as Verb Phrases (VPs), where PPs can function as either complements or adjuncts, offering additional information about the verb. This structural rigidity creates a clear and systematic framework for interpretation, making English syntax relatively straightforward.

oblique case markings, further distinguishing its syntax from English. These markings, coupled with postpositions, emphasize relationships between elements in a way that English prepositions cannot.

Thematic Role Assignment and Flexibility

The Theta Criterion highlights how each language assigns roles like agent, theme, and recipient. English verbs often dictate these roles rigidly, with PPs restricted to specific functions. For example, in "She gave a book to John," the PP "to John" serves as the recipient, a role fixed by the verb "gave." This lack of flexibility ensures precision but limits the potential for varied interpretations.

Urdu, however, demonstrates significant flexibility in theta role assignment due to its postpositional system and interaction with verb aspect. The same PP can serve multiple roles depending on the context and tense. For instance, "سبے کتاب" (kitaab se - "with the book") may indicate an instrument in one sentence and a source in another, depending on the verb's aspect (perfective or imperfective). This dynamic nature allows Urdu speakers to convey nuanced meanings that are less apparent in English.

Cross-Linguistic Insights

Both languages share universal syntactic principles under X-Bar Theory, as seen in the hierarchical organization of PPs. Despite differences in head positioning, both English and Urdu demonstrate the formation of PPs with a head (preposition or postposition) and a complement (noun phrase). However, the placement of these elements reflects their broader syntactic tendencies: English favors immediacy and linearity, while Urdu emphasizes relational depth and contextual variation.

Implications for Linguistic Theory

The analysis underscores the adaptability of X-Bar Theory and the Theta Criterion in analyzing diverse languages. These frameworks accommodate both the rigid, headfirst nature of English and the flexible, head-last tendencies of Urdu, illustrating their universality. At the same time, the differences between the two languages highlight the importance of language-specific features in shaping syntactic and semantic structures.

The comparison of PPs in English and Urdu provides valuable insights into the interplay between universal grammar and language-specific syntax. English's head-

first, SVO order ensures clarity and predictability, while Urdu's head-last, SOV order offers flexibility and nuanced interpretations. These distinctions not only enrich our understanding of these two languages but also emphasize the importance of context and word order in shaping linguistic meaning. By applying X-Bar Theory and the Theta Criterion, this study bridges the gap between theoretical linguistics and practical syntax, showcasing the diversity and complexity of human language.

References

- Adger, D. (2003). Core Syntax: A Minimalist Approach. Oxford University Press.
- Adger, D. (2007). Syntax and Argument Structure. Cambridge University Press.
- Ali, S. S., Amin, M. T., & Ishtiaq, M. M. (2020a). Punctuation errors in writing: A comparative study of students' performance from different Pakistani universities. *sjesr*, 3(1), 165-177.
- Ali, S. S., Farukh, A., & Ishtiaq, M. (2018). Arabic vs English characterization: Comparative analysis of Hind's art of characterization with that of Geoffrey Chaucer. *AL-Qalam*, 23(1), 377-397.
- Ali, S. S., Farukh, A., & Ishtiaq, M. (2019a). Conversation analysis of Muhammad (PBUH) in the light of the model priniciples laid down by the disciplines of linguistics and communication. *Al Qalam*, 24(1), 300-320.
- Ali, S. S., Farukh, A., & Ishtiaq, M. (2019b). Value of animal idioms in bringing about native-like proficiency among EFL learners. *Global Regional Review*, 4(4), 360-368.
- Ali, S. S., Ishtiaq, M., & Khan, M. (2019c). Conversation analysis of Muhammad (PBUH) for exploring his effective use of nonverbal communication including paralinguistic features. *Rahat-ul-Quloob*, 3(2 (2)), 75-86.
- Ali, S. S., Ishtiaq, M., & Shahid, M. (2020b). Perceptions of Pakistani learners of English about standard British and American English: An exploratory approach. *sjesr*, 3(2), 99-106.
- Ali, S. S., Shahid, M., Ishtiaq, M., Hussain, M., & Khan, M. A. (2021). A study of undergraduate students' perceptions regarding code-switching as a teaching strategy. *Elementary Education Online*, 19(3), 3651-3651.
- Arshad, H., Ali, S. S., & Gill, A. (2024). A Comparative Analysis of Syntactic Structures in English and Urdu: Insights through X-Bar Theory and the Theta

Criterion. Advance Social Science Archive Journal, 2(4), 809-824.

- Baker, M. (1996). The Polysynthesis Parameter. Oxford University Press.
- Bobaljik, J. D., & Carnie, A. (2011). *The Syntax of Argument Structure*. Cambridge University Press.
- Borik, O., & Mateu, J. (2014). The Syntax of Argument and Thematic Relations. Cambridge University Press.
- Butt, M. (1993). The Structure of Complex Predicates in Urdu. Stanford University.
- Butt, M. (1993). Urdu as a Verb Second Language. Stanford: CSLI Publications.
- Butt, M., & King, T. H. (2003). Urdu Syntax: Complex Predicates and Agreement. *In Studies in South Asian Linguistics*.
- Carnie, A. (2006). Syntax: A Generative Introduction. Blackwell Publishing.
- Carnie, A. (2007). Constituent Structure. Oxford University Press.
- Chomsky, N. (1970). Remarks on Nominalization. In R. Jacobs & P. Rosenbaum (Eds.), *Readings in English Transformational Grammar*. Ginn.
- Chomsky, N. (1970). Remarks on Nominalization. Readings in English Transformational Grammar, 184-221.
- Chomsky, N. (1981). Lectures on Government and Binding. Foris Publications.
- Chomsky, N. (1986). Knowledge of Language: Its Nature, Origin, and Use. Praeger.
- Chomsky, N. (1995). The Minimalist Program. MIT Press.
- Dowty, D. R. (1991). Thematic proto-roles and argument selection. *Language*, 67(3), 547–619.
- Fillmore, C. J. (1968). The Case for Case. In E. Bach & R. T. Harms (Eds.), Universals in Linguistic Theory. Holt, Rinehart, and Winston.
- Fillmore, C. J. (1977). The Grammar of hitting and breaking. In J. Bresnan (Ed.), *The Mental Representation of Grammatical Relations*. MIT Press.
- Gill, A. Ishtiaq, M. & Khan, I. (2025). Critical discourse analysis of Reham khan's representation in digital discourse: a Feminist perspective using transitivity framework. *Research Consortium Archive (RCA)*, *3(1)* 153-174
- Haider, H. (2012). Syntax of South Asian Languages. Cambridge University Press.
- Ishtiaq, M. & Gill, A. (2024). Application of Chomsky's x-bar theory to Pakistani languages: A syntactic analysis of Urdu and Pashto with reference to English. *Dialogue Social Science Review (DSSR)*, 2(5), 550–560.

- Ishtiaq, M., Gul, N., & Haq, I. U. (2021a). Comparative componential analysis of semantic density of lexical items in surah al fatiha (the Holy Quran) with special reference to various translations in English. *Global Language Review 06(II)*, 317-325.
- Ishtiaq, M., Gul, N., & Hayat, Q. (2021b). Linguistic analysis of the gender representation in Jane Austen's novel, *Persuasion*, using systemic functional grammar. *Global sociological Review*, VI (II), 104-112.
- Ishtiaq, M., Gul, N., & Iqbal, S. W. (2022a). An analysis of the participants' disagreement strategies in computer mediated intercultural communication. *Global Sociological Review*, 07(II), 149-158.
- Ishtiaq, M., Gul, N., & Khan, Y. (2022b). English to Urdu transliteration as a major cause of pronunciation error in L1 & L2 Urdu speakers of English: A pedagogical perspective. *Global Language Review*, VII, 282-298.
- Ishtiaq, M., Kamal, Z., & Iqbal, S. W. (2022c). Parallel structural patterns in internal linguistic systems of English: An integrated approach. *Journal of Humanities, Social and Management Sciences (JHSMS)*, 3(1), 447-456.
- Jackendoff, R. (1990). Semantic Structures. MIT Press.
- Koopman, H. (1984). The Syntax of Verbs. Foris Publications.
- Lehmann, C. (2005). *Grammaticalization: Synchronic Variation and Diachronic Change*. In Linguistic Typology.
- Mahboob, A. (2009). English as an islamic language: A case study of Pakistani english. *World Englishes, 28(2), 175-189.*
- Miyagawa, S. (2010). Why Agree? Why Move? Unifying Agreement-Based and Discourse-Configurational Languages. MIT Press.
- Newmeyer, F. J. (2005). *Possible and Probable Languages: A Generative Perspective on Linguistic Typology*. Oxford University Press.
- Ouhalla, J. (1999). Introducing Transformational Grammar. Arnold.
- Pinker, S. (1994). The Language Instinct: How the Mind Creates Language. HarperCollins.
- Radford, A. (2004). *Minimalist Syntax: Exploring the Structure of English*. Cambridge University Press.
- Radford, A. (2009). Analysing English Sentences: A Minimalist Approach.

Cambridge University Press.

- Rappaport, M., & Levin, B. (2007). Argument Realization. Cambridge University Press.
- Torreco, E. (1998). The Syntax of Spanish Prepositions. MIT Working Papers in Linguistics.

Wechsler, S. (2005). Thematic Roles and Argument Structure. MIT Press.