UNPACKING URDU SYNTAX: A STUDY OF CONSTITUENCY AND INFORMATION STRUCTURE THROUGH PREPOSING

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Abstract

Urdu language follows a word order of SOV (Subject-Object- Verb) which is quite flexible. This flexibility, on one hand, allows syntactic reconfiguration and on the other hand, provides a rich platform for syntactic analysis. This paper aims to analyze how preposing operates as a test for identifying constituents as well as serves as an interface between syntax and information structure. The study draws on Chomsky's Transformational Generative Grammar and Lambrecht Information Structure theory. Through data analysis and theoretical discussion, the study investigates how does preposing determine syntactic units; and how does fronting constituents affect focus and emphasis. The study contributes to the deeper understanding of Urdu syntax by testing constituents through preposing and by analyzing how preposing helps packaging information to achieve communicative goals.

Key Words: *Urdu Syntax, preposing, constituency, information structure, Transformational Generative Grammar*

INTRODUCTION

Urdu, a recognized South-Asian language has an established but relatively flexible syntactic structure. It's typical or standard word order is SOV (Subject-Object-Verb), however, it allows variations in word order configuration, which makes it a rich hub for exploring atypical syntactic expressions constructed through preposing. Preposing is a movement operation whereby a syntactic unit is moved to the beginning of a sentence. These syntactic units, which may be individual words or strings of words, of a sentence are called constituents and must be moved together as a whole string, in order to retain grammaticality of a sentence. Studying preposing in Urdu unveils constituent boundaries and strengthens our understanding of Urdu syntax. This paper aims to investigate which strings of words, in Urdu, can be fronted and for what purposes. In other words, its objectives are two-fold: first is to examine how preposing can be used as a test to identify constituents in Urdu syntax; second is to study how does it impact information organization and interpretation in a sentence. Thus, the study aims to address following research questions

1.What role does Preposing play in identifying constituents and determining phrase structure in Urdu?

2. How does preposing influence the informational structure and discourse flow?

While substantial research has been carried out on Urdu syntax applying Chomsky's theories of Universal Grammar, it remains under investigated with a focus on constituent testing. This study aims to bridge this gap by applying constituent test, specifically Preposing, to explore constituents in Urdu syntax and to validate this test if it can be generalized across categorically distinct languages. Thus, employing Preposing as a tool to identify constituents as well as to package information, offers a more nuanced approach to syntactic analysis, whereby it

contributes to both Generative and Functional linguistics.

Related Literature
Constituents and Constituency Test of Preposing

"Sentences are not simply random words strung together" (Aitchison, 1995: 63). Language has rules governing sentence structure. There are certain specific ways in which words are arranged to form units, which are further sequenced to make larger units. These components which sentences are comprised of are linguistically called as constituents. Carnie (2013:73) defines constituents as: "A group of words that function together as a unit", whereas Tallerman (2015:152) opines that a constituent is a set of words that forms a phrase in a sentence. So, we can say syntactic structures are constructed by combining phrases in specific patterns in different languages. The resultant syntactic expression can be represented through tree diagram, albeit the question arises how to analyse the represented syntactic units as constituents. A set of linguistic heuristics which identify and validate components of a sentence as its constituents have been developed over a period of time. Some of such tests are Coordination, Substitution, Movement, Preposing, Topicalization, Clefting, Pseudo-clefting, Answer-fragment etc. (Lasnik & Sells, 1983; Radford, 2004; Osborne, 2018). Preposing as a constituency test was introduced by Chomsky (1957, 1965), though he didn't use this term, however he used term "syntactic movement" which laid foundations for constituent analysis. Ray Jackendoff, Chomsky's student and collaborator in developing X Bar theory (1977, 1980) also advocated Preposing as a diagnostic test for constituents. Later on, Howard Lasnik & Peter sells (1983); Radford (1988); Haegeman (1994); and Lambrecht (1994) clearly mentioned Movement as constituency test which included Preposing or fronting of constituents. Plethora of research has been conducted for English Syntactic analysis of constituents through Preposing. Though Urdu syntax has been explored from other perspectives like structure of complex predicates (Miriam, B. 1995); Scrambling and binding (Ayesha, K. 2000); Rajesh, B. & Vaneeta, D. 2007); and Null elements in discourse structure (Miriam, B. & Halloway, K. T. 1997) however, analyzing Urdu constituents through Preposing remain under-explored. This provides a rationale for conducting research in this domain.

Preposing and Information Structure

Significant research has been conducted on analyzing impact of Preposing on information status in English, German, French, Japanese, Hungarian and other languages' syntax. Prince, Ellen. F (1981) explores how topicalization is achieved through preposing affecting given versus new information in English syntactic expressions. Ward, Gregory & Birner, Betty J. (1994) investigates effect of syntactic fronting on information organization in English, through different types of preposing like contrastive focus and topic marking (B. J. & W. G. Birner, 2006), (B. J. Birner & Ward, 2009). Fanselow, Gisbert (2001) & Frey, Werner (2004) provide link between syntactic reordering like Scrambling and Preposing, and interpretation of information, in German. Kuno, Susumu (1973) explores how frequently used topic-prominent structure, in Japanese, reflects preposing; and creates links between syntactic arrangement and pragmatic roles. Rizzi, Luigi (1997) studies syntactic placement of preposed elements and develops split CP hypothesis for French. É. Kiss, Katalin (1998) unveils impact of preposing on information

presentation like focus and emphasis, in Hungarian. While, Ayesha Kidwai (1999) explores Hindi-Urdu word order and focus position, Elena Bashir urges for investigating Urdu syntax distinctly from the perspective of discourse and pragmatic functions, specifically focusing on information structure studies (Bashir, 2011). Miriam Butt (2014) also examines Hindi-Urdu syntax from the perspective of Information structure and WH- movement. More research is required for exploring impact of preposing on information organization in Urdu distinctly.

Theoretical Framework and Methodology

Theoretical Framework

The study is underpinned by Chomsky's Transformational- Generative Grammar (TGG) and Lambrecht Information Structure Theory (IST).

Chomsky's TGG is a phenomenal work that laid foundations for modern linguistics in 1957. It adopts formalist approach to explain structure of language. As opined by Rahman, T. (2010) Chomsky, having interest in Mathematics, "expresses syntactic rules in quasi-mathematical manner" called as Phrase Structure Rules (PS Rules). The focus of TGG are the syntactic units /constituents which are building blocks of a sentence. TGG is the umbrella term for several other theories proposed by Chomsky which analyze syntactic structure through PS rules, Transformations, and Deep & Surface Structures. Later, X- Bar theory was proposed by Chomsky is 1970s, which was further developed by his student Ray Jackendoff in 1980s, to refine PS Rules and make them universally consistent across languages. An important aspect of X Bar theory is the recursive, three level hierarchy of constituents, which can be represented through Tree Diagram i.e. Maximal Projection (denoted by XP), Intermediate Projection (denoted by X') and Head (denoted by X). X is the core of the phrase that gives the phrase its category. For example, Noun, Verb, Adjective, Preposition. X' is the X prime, being intermediate projection of phrase, while XP is the phrase level e.g. NP, VP, Adj P etc. Other components are Specifier (modifies whole phrase like a, the) and Complement (argument selected by the Head e.g., direct object). As the tree diagrams are considered to portray the constituent structure of sentences, these can be validated through certain tests developed over time (Radford, 2004). These tests determine the structure of a sentence and are used to validate certain strings of words as constituents or syntactic units. These include Coordination, Substitution, Movement etc. Preposing, also called fronting, is a specific type of Movement test whereby a constituent is moved to the beginning of the sentence. Preposing is a syntactic operation which serves not only stylistic purposes but discourse /communicative functions as well, which can be described through Lambrecht's Information Structure Theory.

Lambrecht's Information Structure Theory (IST) is a framework for analyzing how information is organized by the speakers, particularly in atypical constituent configuration, for the purpose of different communicative functions. Rooted in functional linguistics, it connects structural form with communicative acts. The term "Information Structure" adopted from Halliday is the "formal expression of the pragmatic structuring of a proposition in discourse" (Lambrecht, 1994:pg:5). The information structure can be divided into three basic elements: Pre-supposition, focus and topic. Pre-supposition is the information in a sentence which speaker assumes, to be known by the listener; focus is the new, emphasized part of the sentence; and the

topic/ comment is the old, given, known information in a sentence. Any of these elements can be preposed in order to highlight it "as a topic containing familiar/old information, or a focused constituent containing unfamiliar/new information" (Radford, 2004). Thus, the theory draws out interaction of syntax and pragmatics, whereby different communicative functions are performed through movement of syntactic constituents. Moreover, it entails that preposing is a surface level syntactic operation which reflects deeper level discourse choices made by speaker about topic and focus.

Methodology

A qualitative-descriptive approach was adopted for the data collected through random selection of following sentences of Urdu.

1. میں نے نظم یاد کی

Mei ne nazm yad ki.

2. بچے نے پنسل سےکاپی پر مضمون لکھ

Bachay ne pencil se copy pur mazmoon likha.

3. میں نے دیکھا کے وہ لڑکا چائےپی دبا تھا

Mei ne daikha k Wo larka chai pi raha tha.

4. سارا نے یہ والی داراز بند کر دی ہے

Sara ne ye wali daraz bund kr di ha.

5. سائم کو خود کام کرنا پڑا

Saim ko khud kaam krna pra.

Data Analysis and interpretation

Above given sentences were analyzed applying preposing as constituency test. The effect of preposing of different constituents was also analyzed.
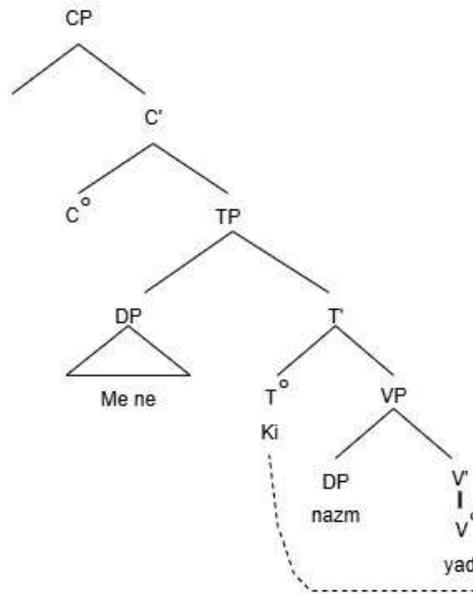
Look at the sentence:

میں نے نظم یاد کی

"mei ne nazm yaad ki."

The sentence has neutral word order i.e., Subject DP (me ne) – Object DP (nazm) – Verb VP (yad ki). The information structure is balanced in this sentence as no element has been emphasized. sing X-bar theory, it can be represented through following tree diagram:**Tree diagram**

Me ne nazm yad ki   میں نے نظم یاد کی

Following are some of the re-arrangements of the sentence 1. In order to check which parts can be moved to the front of the sentence keeping grammaticality of the sentence intact, different re-orderings of the sentence are analyzed.

1.1 nazm mei ne yaad ki.
1.2 nazm yaad ki mei ne.
1.3 Yaad ki mei ne nazm.
1.4 Yaad ki nazm mei ne.
1.5 Yaad mei ne ki nazm.*
1.6 Ki mei ne nazm yaad.*
1.7 mei nazm ne yaad ki.*

Sentences 1.1- 1.4 prove that [me ne], [nazm] and [yad ki] are constituents being Subject DP, Object DP and VP respectively, as they can be preposed as complete units. This is in congruence with the above given tree diagram. As reported by Radford (2004), only maximal projection can be preposed, all the above given alternative sentences show that [me ne] [nazm] [yad ki] are the constituents at maximal projection. However, 1.5 and 1.6 show that if a constituent is broken: as 'yaad' and 'ki' is split, the structures collapse, though such constructions can be considered correct in poetic expressions. The reason is that in the deep structure tense "ki" is already separated from verb "yad" and just like English language, through tense lowering, this tense "ki" lowers to combine verb "yad". As far as 1.7 is concerned, it is also ungrammatical as 'nazm' became a Subject instead of Object which is not logical. Thus, 1.5, 1.6 and 1.7 are grammatically incorrect proving that the ergative marker 'ne' can't be split from 'mei', making it a constituent [mei ne], similarly, 'ki' can't be split from 'yad' being a part of constituent that is [yad ki] VP.

Now let's look at impact of preposing. In original sentence 1, 'me ne' being default topic is already in the initial position and new information is all around. 1.1 and 1.2 show emphasis is on 'nazm' as it is preposed which introduces topicality or contrast. This can be employed if the purpose is to draw attention on what was memorized not who memorized it. The sentence becomes about 'nazm', shifting topic from 'mei ne' to 'nazm'. It also presents a contrast, even if not clearly stated. This creates implicature. It implies not any other thing like kitab, kahani, mazmoon; but 'nazm' was memorized. It can also be used to link with previous discourse smoothly like answering question: kia yad kia tum ne? (What did you memorize?) So, 1.2: nazm yaad ki mei ne., becomes more appropriate in terms of maintaining discourse and answering question clearly. 1.3 is unusual but acceptable, and the emphasis is shifted to 'yad ki'. Similarly, 1.4 though seem poetic and have rhetorical effect, is also possible, albeit it disturbs discourse flow.

2. بچے نے پنسل سےکاپی پر مضمون لکھا
 Bachay ne pencil se copy pur mazmoon likha.
The sentence has neutral word order i.e., Subject DP (Bachay ne) – Instrument PP (pencil se)- Location PP (copy pur) Object DP (Mazmoon) – Verb VP(likha). The information is structured logically in this sentence and there seems smooth flow of constituents without any constituent being highlighted. Using X-bar theory, it can be represented through following tree diagram:

بچے نے پنسل سے کاپی پر مزمون لکھا

Bachay ne pencil se copy pur mazmoon likha
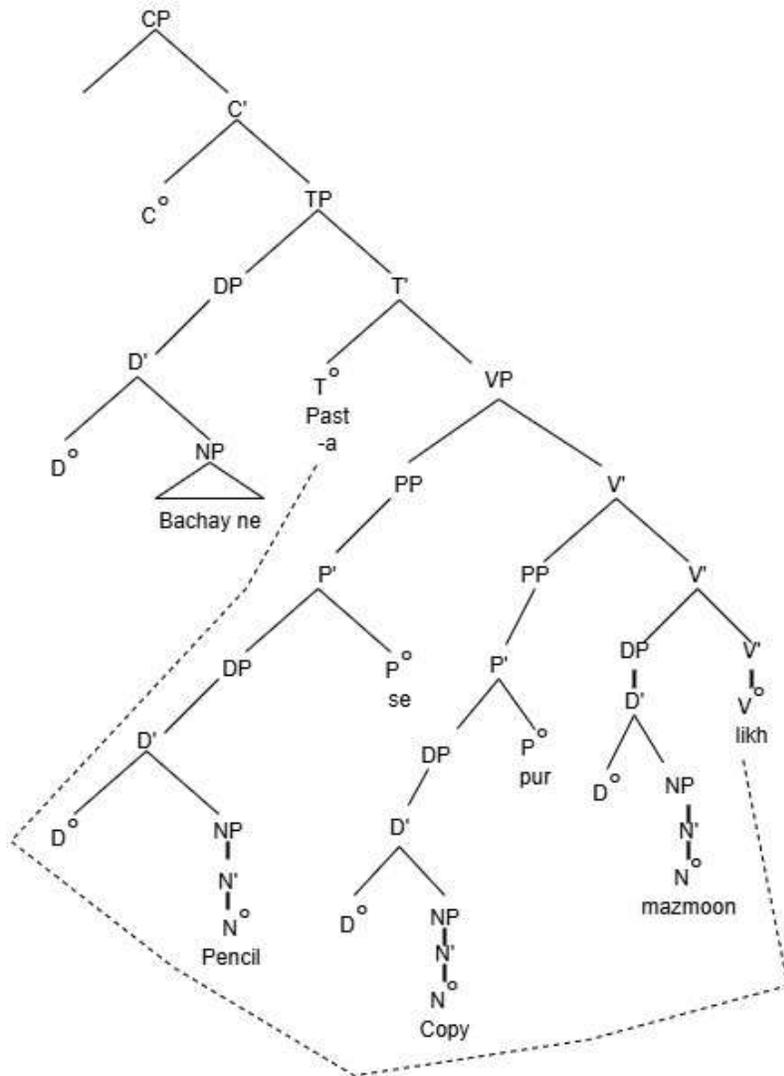
Now let's apply preposing and discuss its impact on information organization. Preposing the Object DP would shape above sentence as follows:

2.1 Mazmoon, bachay ne pencil se copy pur likha.
Here 'mazmoon' becomes the topic or contrastive focus. Highlighting 'mazmoon', answers the question like: What was written? and contrasts with other types of writing like: poem, story etc. Preposing instrument PP or location PP would configure sentence as follows:
2.2 Pencil se, copy pur bachay ne mazmoon likha. / Pencil se bachay ne copy pur mazmoon likha.
2.3 Copy pur, bachay ne pencil se mazmoon likha.

In these sentences preposing, apart from presenting 'pencil' or 'copy' as topical, creates implicatures. 2.2 implies that not something else (like pen, marker, pointer etc.) but pencil was used. While 2.3 emphasizes where the action of writing happened. These are useful in contextual discourse as these prepose what is known or expected information. Further, 2.1, 2.2, and 2.3 confirm that [bachay ne] [pencil se] [copy pur] [mazmoon] [likha] are constituents and must be moved together as otherwise sentence structure may collapse. Another significant point is that, normally, emphasis is on the focus, but it may shift from focus to topic depending on the context, especially when topic is introduced contrastively (as in 2.2 and 2.3)

3. سارا نے یہ والی داراز بند کر دی ہے
sara ne ye wali daraz bund kr di ha.
The tree diagram for this sentence would be:
Tree diagram

سارہ نے یہ والی دراز بند کر دی ہے
Sara ne ye wali daraz band kar di hai
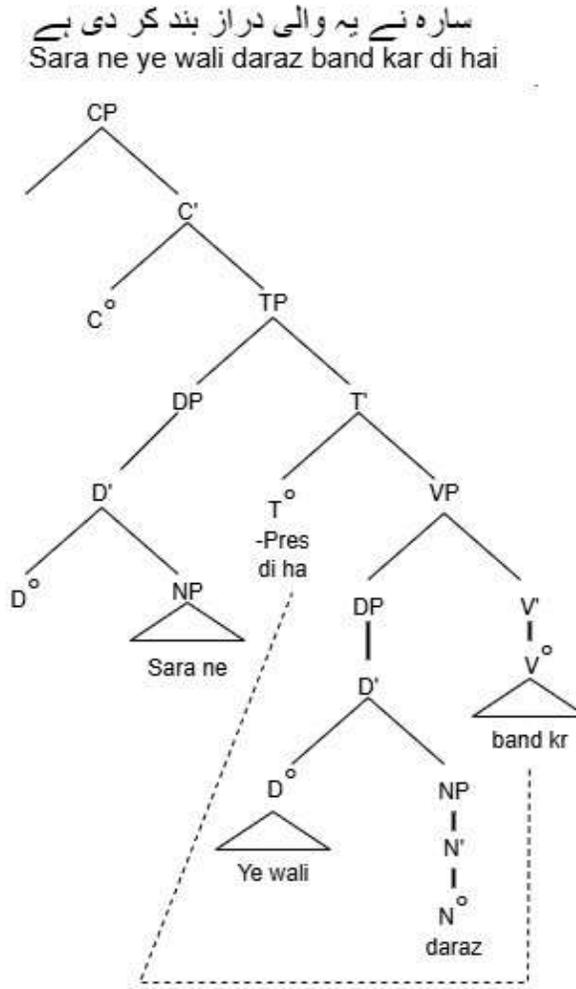
Following expressions would be grammatical if we reconfigure original sentence after applying preposing.

4.1 ye wali daraz sara ne bund kr di ha.

4.2 Bund kr di ha sara ne ye wali daraz.

4.3 ye wali daraz bund kr di ha sara ne.

However, following expressions would be ungrammatical

4.4 daraz ye wali sara ne bund kr di ha.*

4.5 daraz bund kr di ha ye wali sara ne.*

This is in harmony with the X bar tree which confirms that [ye wali daraz] [sara ne] [bund kr di ha] are constituents and must be moved together. As far as impact of preposing is considered, 4.1 and 4.3 preposes object DP which can be done either for contrastive or corrective focus, or answering a question. 4.2 preposes VP. It has emphasis on the action of closing the drawer. It is unusual and is marked structure, which may be used for stylistic or dramatic effect.

میں نے دیکھا کے وہ لڑکا چائےپی دبا تھا 4
Mei ne daikha ke wo larka chai pi raha tha.

This is a complex sentence having main clause which is the topic: ' mei ne daikha' and embedded clause which is the focus: ' ke wo larka chai pi raha tha.' Both the clauses can further be divided into topic and focus, on the basis of information organization, like in the main clause [mei ne] is topic and [daikha] is focus, whereas in the embedded clause [wo larka] is the topic and [chai pi raha tha] is the focus. As this is a complex sentence, the emphasis is on the embedded clause. This sentence can be represented as follows:

میں نے دیکھا کے وو لڑکا چائی پی رہا تھا
Main ne dekha k wo larka chai pi raha tha
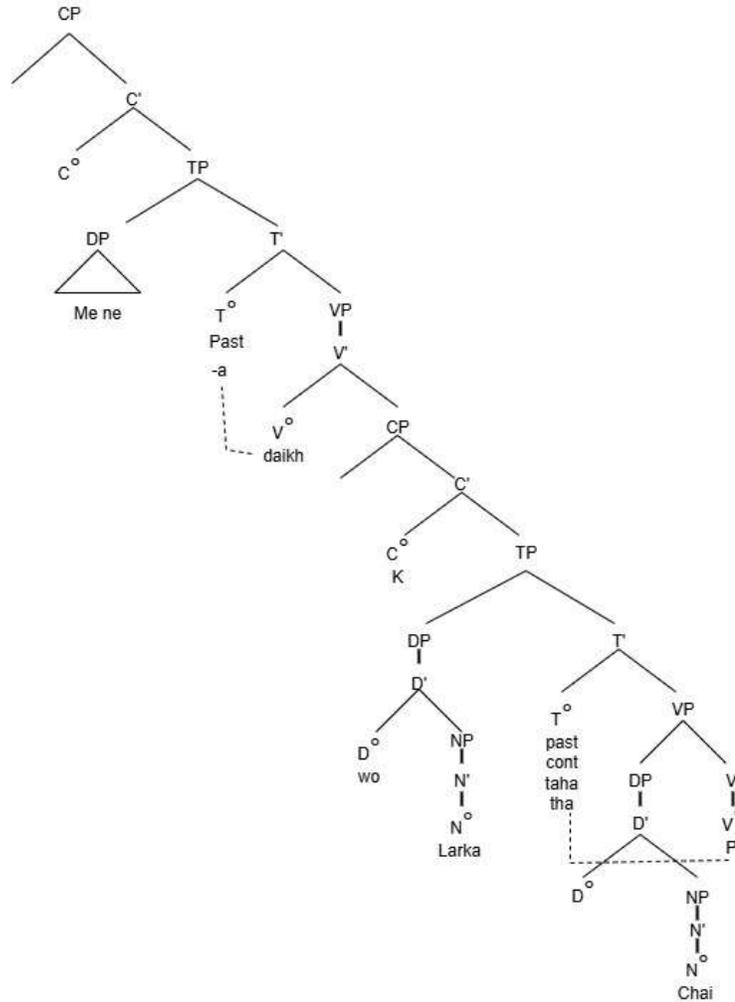
Now if we want to highlight embedded clause, we can prepose it, but there's a constraint. The embedded clause 'ke wo larka chai pi raha tha' can't be preposed, even though it is the maximal projection as it is the largest expression headed by complementizer 'ke'. If we rearrange the constituents of this complex sentence, it may have following structures:

4.1 ke wo larka chai pi raha tha, me ne daikha.*

4.2 Wo larka chai pi raha tha, me ne daikha ke.*

4.3 Wo larka chai pi raha tha, me ne daikha.

4.1 and 4.2 are ungrammatical. 4.2 is ungrammatical because head of CP has been split from its other elements. But even adding head with its other elements in 4.1 does not make the expression grammatical. This is the same restriction noted by Radford (2004), in English syntactic expressions where infinitival 'to' of infinitival Tense Phrase can't be preposed with rest of the

elements of the same phrase. In other words, the TP can be preposed only without its head. Here, too, 'ke' lacks the intrinsic lexical content which restricts it to be highlighted and thus, preposed. This also brings to light another significant impact of preposing. It is that by bringing important information in the beginning, it improves accessibility and comprehension of information for listeners, especially when it is a longer/complex discourse.

5. سائم کو خود کام کرنا پڑا
"saim ko khud kaam krna para."
This is a bit different sentence where emphatic pronoun 'khud' is used. The topic is 'Ali ko' while focus is 'khud kaam krna pra.' The emphasis is lexically represented by emphatic pronoun in the focus. This is the neutral order where Ali is known in the context. The X bar tree would be:

صائم کو خود کھانا پکانا پرا
Saim ko khud khana pkana pra
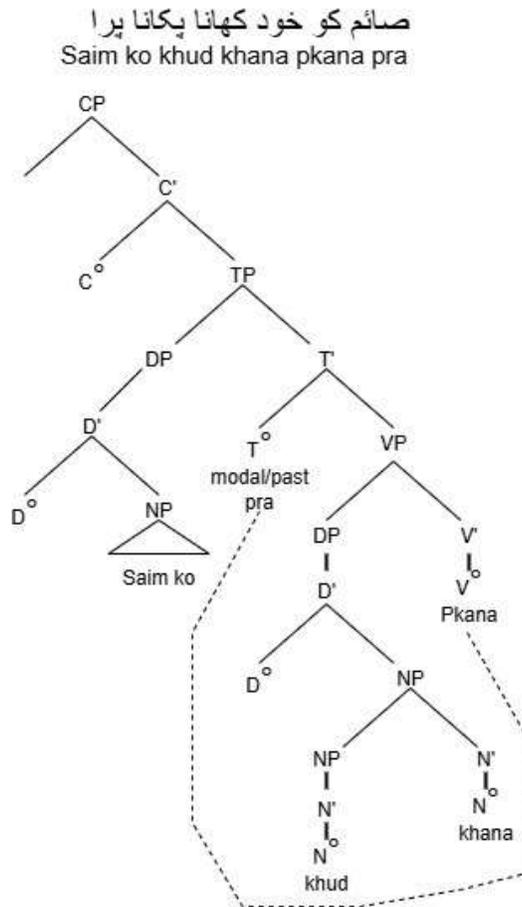
Re arranging constituents order, without adding/deleting words, would configure following grammatically acceptable expressions:
5.1 khud saim ko kaam krna para.
5.2 Kaam saim ko khud krna para.

5.3 Khud kaam saim ko krna para.
5.4 Kaam khud saim ko krna para.
5.5 Kaam saim ko krna para khud.
In 5.1 emphasis is still on 'khud' – can be used for contrastive focus. In 5.2 emphasis is shifted to 'kaam' which becomes the topic of the information. In 5.3 impact of preposing is creating stylistic, poetic or emphatic speech. 5.4 is also valid with a soft emphasis on 'khud', while 5.5 is unusual but acceptable in poetic context. However, following expressions are ungrammatical as constituents are broken while being moved to the front:
5.6 Para Ali ko kaam krna khud.*
5.7 Ali kaam ko khud krna para *

Findings & Conclusion
Findings

Preposing as constituency test
Preposing is a commonly used phenomenon in Urdu and is a sort of diagnostic test for constituency. It mostly affects NPs of direct/indirect object and PPs, however, preposing Subject NPs is occasional because these are topical by default. There seems to be high acceptability of preposing Object NPs and PPs, whereas medium to high acceptability for indirect object NPs.
It is to be noted that some of the groupings of words resist preposing, which shows that they are not independent unit but are merged with other larger units. For instance, partial verb phrase movement as discussed in 1.5 & 1.6. Both the verbs (strong and light) along with tense must be moved together, in order to maintain grammaticality of a sentence. Similarly, determiner and noun can not be separated in Urdu as shown in 4.4 & 4.5 separating determiner from noun collapses the syntactic structure. Same is the case with preposition and noun of a prepositional phrase can not be preposed separately. Noun of a PP is not a standalone unit (see example no. 2).
A constraint noted in the research is that preposing constituents within complex constructions like one discussed in example 4, where firstly, there cannot be preposing within embedded clause, whole embedded clause must be moved, secondly, it must be moved only without its head.

Preposing and Information Structure
Preposing in Urdu impacts information structure in terms of topic, focus and contrast. Speakers prepose constituents for different purposes. Direct object preposing is mostly done to direct the focus away from action to object. Other reasons are: bringing clarity, putting emphasis or tracking referent. Indirect object preposing also serves to give clarity and to highlight recipient over direct object. Prepositional phrase preposing highlights context in terms of place or time. In complex constructions fronting embedded clause may shift emphasis on main clause. Preposing NPs having emphatic pronouns enhances emphasis on pronouns.
Conclusion
Constituents are the parts of a sentence that behave as a single construct. In Urdu, like other languages if such a construct can be fronted without disturbing grammaticality and meaning, it proves to be a constituent. Preposing is one of the syntactic tests used to identify constituents. It

not only identifies constituents but also affects the information structure of the sentence. It not only impacts given (topic); and new (focus) information but also the flow of discourse. Preposing in Urdu often fronts topics or contrastive elements which aligns with discourse principles i.e., what is known or being contrasted is moved earlier in the sentence; and what is to be known or focus often appears later. It also reshapes the information structure and subtly affects how listener processes the sentence. Further, it introduces implicatures as it helps us infer what is not explicitly said.

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