Clausal-Internal Scrambling in the Urdu Language: A Derivation by Phases

Asad Ali, Qaisar Jabbar & Humayun Kiani

University of Lahore, Punjab, Pakistan
masad7721@gmail.com

ABSTRACT

Scrambling in Clausal-Internal is accounted for employing minimalist program as a theoretical framework on Urdu Naturalistic data in this study. For empirical evidence, an Urdu corpus has been accumulated in audio-recording forms from 100 competent Urdu speakers within the natural setting, taking *Naturalist Inquiry* as methodological purposes. Employing minimalist program on Urdu data, this study vehemently postulates that the dislocation of arguments from base to host position only hinges on the phase heads— C_o and v_o; hence no other external devices essentially necessitate accounting for scrambling. This study highlighted scrambling in clausal-internal specifically within Indo-Aryan Languages is Universal Phase-Based parsimony, and it is only controlled by the exiting mechanism within the phase theory. Moreover, the only *merge* and *move* operations linearize the CP in a phase-based fashion while CP is a higher phase and vP is a lower phase. No additional AGRoP necessitates scrambling, but one phase successively and cyclically converges into a higher phase level, i.e. CP and the derivation matches at LF and PF interfaces satisfying Full Interpretation (FI).

1. Introduction

Scrambling of nominal arguments within the derivation in Indo-Aryan language—Urdu is a ubiquitous phenomenon often considered to be unlicensed, illegitimate and free-shifting of arguments (Mahajan 1990, 1994b; Saito, 1985; Saito & Fukui, 1998; Müller & Sternefeld 1994; Vikner, 1994; Miyagawa, 1997; Kidwai, 2000; Simpson & Bhattacharya, 2003; Bhatt & Dayal, 2007). All these studies, directly and indirectly, pursued the generativist paradigm that is exclusively formulated by Noam Chomsky (1995) under the tent of minimalism and derivation by phase (Chomsky, Belletti and Rizzi, 2002).

This is very significant that all the studies conducted on Asian languages postulated various assumptions on the scrambling of arguments within the minimalist paradigm, but they violated the fundamental dictum established within Chomskyyan's framework, i.e. *Structural dependency and Uniformity*. The studies conducted by Mahajan (1990), Kidwai (2000) and Bailyn (2020) posited that scrambling is constituted by external mechanism imposed on the derivation, but Chomskyyan's model did not accept this. This is theoretically inconsistent with human cognition. If we accept the external device, the basic condition of the economy will be violated because we impose an additional burden on the faculty of language. For this, it is very evident to account for the scrambling properties of languages within a minimalist program (Chomsky, 1995) and the derivation by phases (Chomsky, Belletti and Rizzi, 2002) in a true sense and spirit.

Phase heads within the derivation control the *Structural dependency* and *uniformity* if we only view linguistic data within Chomskyyan's Framework. Subject and Object DPs in Urdu, like Hindi, are freely dislocated within the derivation, but these remain within the CP level, and they do not even cross the CP level. It means that the shifting of arguments is uniformed. This uniformity must be controlled and legitimated by the existing machinery, not even any external device.

Pursuing Tada's (1990) assumption of *uniformity* within scrambling, the present study predicts that scrambling within Urdu data is uniformed and structurally convergent. The generativism model, the minimalist program (Chomsky, 1995, 2008; Chomsky, Belletti and Rizzi, 2002), has been adopted to ensure uniformity and structural dependency descriptively within Urdu data. Employing Chomskyyan's generative theory on Urdu *scrambling* (1998)

constitutes that phase heads (C_o) and (v_o) legitimate *uniformity* in clausal-internal scrambling.

The theoretical framework that has been employed in this research is the recent version of the Minimalist Program (MP), as laid out by Chomsky (1993, 1994, 1995, 2000, 2001a) and in particular Chomsky's Derivation by Phase (2001b) to account for *free* scrambling arguments in natural languages.

Minimalist Program (1995) methodologically consists of two basic recursive operations: *Merge, Move* and some conditions—locality, minimal link condition, and the economy imposed to ensure grammaticality. Merge is the very initial operation that works on pair-fashion and constructs a pair of syntactic objects. In other words, Merge combines head with its respective complement, and this hierarchically constructed structure is further merged with Spec. *Move* picks those existing items and places them in a c-commanding position. In the first step, merging items (head with complement) is purely based on feature specifications. Features are classified as either *interpretable* or *uninterpretable*. They possessed semantic content or semantically contentless. For a convergent derivation, an uninterpretable feature (F) of a Head is a (Probe), and it must be deleted when it is placed in a local relation with another feature, 'F' of the head of XP (Goal).

In the latest version of the Minimalist Program (1995), the configuration of uninterpretable features requires triggering of overt displacement of an XP in one language but not in others. Thus functional features are divided into two domains: *strong features* vs *weak features*. Strong features motivate overt XP movement, while weak features do not linearize overt XP movement. English and German possessed strong *Wh-features* that trigger overt movement but Persian lacks. Urdu and Hindi are complex languages that have both types of features. Urdu phase heads possessed sometimes strong Wh-features that trigger overt movement. However, sometimes it did not need any overt movement. Instead, moved elements remained *in-situ* dislocate (Maqsood et al., 2019). Thus, languages vary concerning formal features and their association. These idiosyncratic properties of language are treated in a more unified fashion in the most recent version of the Minimalist Program (2008).

From the syntactic point of view, scrambling is a very significant research domain as it explicitly provides a syntactic representation of the I-language structure of the human faculty of language. It further tells us about the flexibility of argument shifting within the different language because the syntactic theory claimed that arguments had been frozen unless all the grammatical features will have been valued,

checked and deleted. Nevertheless, after satisfying the grammatical features in Indo-Aryan Languages, some arguments move freely within the derivation. They must be accounted for uniformly within the generative theory. This is the core concern of this study.

Many studies have been conducted on free-shifting of arguments technically called scrambling. They claimed that this phenomenon could not be accounted for unless an additional mechanism has been imposed on the system theoretically. However, within the generative framework, if we add something external mechanism to human cognition, it will burden the human faculty of language. Moreover, the descriptive mechanism will be more complex and cumbersome as Mahajan (1990) adopts AgroP and IP models of Pollock (1989), and in 2000, Kidwai claimed that scrambling is due to XP-adjunction. It is a syntactic operation just like other operations—A-movement, A-bar movement, Wh-movement and Topicalization. It must be evident that a unified and fully derivative mechanism must be required to account for scrambling within the generative framework (1995). For this purposes, this study is being attempted to develop a unified model for scrambling within the generative model.

2. Literature Review

The displacement of constituents that adjoined to IP and VP as adjuncts has been firstly observed by Ross (1967) as scrambling, and after that, further investigation of this mechanism has been developed in generative paradigm in Chomskyyan's Framework (1995 and subsequent works). After that, two approaches have been developed on scrambling under various models. They are demarcated into *based-generated* and *movement*.

Approaches' on scrambling are divided into two domains based-generated and movement approaches. Base-generated approach ascertained that it is free word order at least D-Structure under the tent of GB theory and if we take Minimalist program (1995) so scrambling is the result of operation MERGE.

Based Generated approaches suggested that scrambling is *a non-configurational* shifting of arguments (Hale, 1980; Farmer, 1980 for Japanese; Haider, 1990 for German; T. Mahajan, 1990 for Hindi and Urdu; Kiss, 1994, 2003; Miyagawa, 2001). The other claimed that scrambling is *configurational* and hierarchically systematic dislocation of arguments from base position to host position (Saito and Hoji 1983, Hoji, 1985, Saito, 1985 for Japanese; Bayer and Kornfilt, 1994 for German; and Neeleman, 1994 for Dutch). Kiss (2003) claimed that "Scrambling may not affect the semantic interpretation of the sentence" (p. 228). Saito (1983) and his associates agree to this

proposition, but he and his associates' favour scrambling are legitimately due to movement.

Furthermore, Tada (1990) proposed that the scrambling within the sentence-initial position in all languages hinges on reconstruction at the LF interface only. He has posited that scrambling is a *uniform* property of language. It can be accounted only for this if we apply a generative procedure to construct the data for empirical purposes. Secondly, Kitahara (2000) also favoured the generative model and predicted that it elegantly interprets the scrambling properties. Bošković and Takahashi (1998), working on base-generation approach, suggested that "… scrambled elements are directly base-generated in their surface positions and undergo LF movement (lowering in most cases) to the positions where they receive theta roles." Saito and Fukui (1998) also proposed that scrambling is an *optional operation*, and this movement also requires a special merging case within the derivation.

Working on Japanese, they postulated that it is *semantically vacuous* and mismatches at LF. They posited that head parameter properties of language control this type of movement, not even other aspects. For this, they provide a fully developed mechanism that incorporates English as well as Japanese.

Now, we moved towards the movement based-scrambling. Many proposals have been dedicated in this line of inquiry (Ross, 1967; Saito, 1985; 1992, Saito & Fukui, 1998; Haider & Rosengren, 2003; Grewendorf & Sabel, 1999; Müller and Sternefeld, 1994; Mahajan, 1994; Bailyn 2001, 2020; Kidwai, 2000). Related to Asian languages, it is evident to evaluate Mahajan (1990) proposal in which he has dealt with the scrambling of nominalizations within Binding Theory (1985), taking data of Hindi language. He has suggested that the nature of scrambling can be examined with binding.

According to Miyagawa (1997), scramblings are of two types A-scrambling, which is adhered with a few features on T and A-bar scrambling associated with focus. Miyagawa (2001, 2003) further argued that EPP motivates and licenses A-scrambling. Working on Hindi, Kidwai (2000, p. 9) claimed that scrambling is marked as "This shift marked the move away from a system of rules to a system of grammatical principles and generalized constraints on grammatical outputs." In 2000, Bhatt & Dayal posited that Hindi and Urdu language structure is SOV, not SVO. In this way, the scrambled arguments move on specifier or adjoined position.

Kidwai (2000) worked on the scrambling properties of Asian languages, suggested that leftward scrambling must be a uniform characterization as an XP-Adjunction Operation. This leftward movement is neither semantically null nor fully optional. She claimed that scrambled elements must be analyzed to positional *focus constructions* in natural languages based on Urdu and Hindi data. She posited a mechanism of leftward scrambling theoretically employing Minimalist Program (Chomsky, 1995). She argued that XP-Adjunction is a morphosyntactic driven operation. She suggested that many issues are involved in an analysis of scrambling as (uniformly) XP-adjunction in the PF component; the key features of her analysis are not entirely compatible with MP.

Abnegating all the previous proposals regarding the architecture of minimalist grammar, she suggested that linguistic scholars only simplify the exiting mechanism in the grammar and neither construct a new mechanism nor eliminate any extra assumptions. However, she eliminates the need for copy deletion at LF to create the operator-variable pair—the ordering between this deletion and applying the binding theory and further the need for a reference to the L/L-bar distinction in the binding theory and copy-deletion mechanisms in the grammar. She proposed that her proposal also simplifies the economic condition of full interpretable and some extensions of its role in the grammar.

Despite this, the scrambling of elements within the derivation cannot be dealt only with XP-adjunction. In this paper, employing Tada's (1990) assumption that scrambling is *uniformed*, we suggest that scrambling, especially in Urdu within clausal-internal, is only controlled with the universal properties of Phase heads. According to Chomsky (1998), C_o and v_o are the two-phase heads, and they linearize the derivation. In this paper, we establish how to do phases control scrambling, especially in the Urdu language as well and do it necessitate any external device to account for scrambling properties in Asian languages.

3. Method

For methodological proposes, this study adopts naturalistic inquiry (Chomsky, 1984). All the data has been collected in a naturalistic setting. For this, competent Urdu speaker[s] has been selected. For the selection of competent speakers/participants, demographic information has been collected by the speakers/participants for presenting them a performance. At the initial level, 100 Urdu speakers have been selected and divided into four sub-groups. Their natural speech has been recorded in audio form. After initial collection, data is in four sections, and the recording detail has been provided explicitly below in the table.

Table 3.1 Total Audio-recording

S. No	Recordings	Minutes
1	First Section	1 Hs 19 Min
2	Second Section	56 Min 48 Sec
3	Third Section	41Min 33 Sec
3	Forth Section	52 Min 22 Sec
4	Total Recording	3 H 54 Min
5	Total Sentences	1724

The data has been represented in section 3.2 given below:

Table 3.2 Data Presentation

S. No	Data
1	*Ali saeeb khaa-ta hai.* **Ali eats an apple.**
2	*Saeeb Ali Khaa-ta hai.* **Ali eats an apple**
3	*Zoya-ko Amei-ne Salgeera-ka Toofa dii-aa* **Mother gave Zoya Birthday gift.**
4	*Amei-ne Salgeera-ka Toofa Zoya-ko dii-aa* **Mother gave Zoya Birthday gift.**
5	**Zoya-ko Toofa Salgeera-ka Amei-ne dii-aa* **Mother gave a Birthday gift to Zoya.**
6	*Nooker-ne jaldi-se choha pakar liya* **The servant quickly caught the thief.**
7	*Nooker-ne choha jaldi-se pakar liya* **Servant caught the thief quickly.**
8	*Mei-ne bi subho chaee pii-thi* **I have taken tea in the morning.**
9	*Chaee pii-thi mei-ne bi subho.* **I have taken tea in the morning.**
10	**Pii-thi chaee mei-ne bi Subho.* **I have taken tea in the morning.**
11	*Jalsa Logo-ne ki-aa.* **People conducted a meeting.**
12	*Bna-ee Kheer Afshan-ne.* **Afshan prepared custard.**
13	*Nooker-ne toor di-aa glass* **The servant has broken the glass.**
14	*Humar-ee Abu Amm Ly-kar aye.* **Our father has brought mangoes.**
15	*Naii Kitaab-een saab-ne kharee-die.* **All bought new books.**

For the selection of sentence out of the collected dataset, it has been developed *random scale sampling*. Sentences have been selected randomly. The selected

sentence has been analyzed according to the CP analysis to check the scrambling mechanism. Each sentence is divided into two phases: the lower phase is *v*P, and the upper phase is the CP phase. According to Chomsky (1995), these phases are headed by unique heads v_o and C_o. They linearize the sentences and ensure the shifting of Subject (DPs) and Object (DPs) positions within their domain.

4. Findings

This section provides all the data explicitly, and the level of our analysis is CP. The CP contains vP the lower head, and the upper head is CP. All the scrambling from right-to-left and left-to-right is all and only constituted by these unique phase heads
See the examples from the Urdu language given below:[1]

a) *[Ali] [saeeb] khaa-ta hai.*
   Ali   Apple   Eat-s   is
   SUB/3P/SG OBJ/3P/SG   V-InF
   Aux/3P/SG
   'Ali eats apple.'

b) *[Saeeb] [Ali]   Khaa-ta   hai.*
   Apple   Ali   Eat-s   is
   OBJ/3P/SG SUB/3P/SG V-In   Aux/3P/SG
   'Ali eats apple.'

---

1 = first person
2= second person
3= third person
Acc=Accusative case
Adj= Adjective
Adv= Adverb
Asp=Aspect
C=Complementizer
Aux=Auxiliary
CP=Complementizer Projection
Dat= Dative case
D= Determiner
DP= Determiner Projection
Erg= Ergative case
INF= Infinitive
Mas = Masculine
N= Noun
NP= Noun Phrase,
Post= Postposition
PostP= Postpositional Phrase
Nom=Nominative case
PL= Plural
P= Preposition
PP= Prepositional Phrase
SG= Singular
T= Tense
TP = Tense Phrase
V=Verb
VP= Verb Phrase
v= light verb
vP= light verb Phrase
*=ungrammatical sentences

c) *Khaa-ta   hai   [Ali] [Saeeb]*
   Eat-s is   Ali   Apple
   V-InF Aux/3P/SG   SUB/3P/SG
   OBJ/3P/SG
    'Ali eats apple.'

d) *Khaa-ta hai [Saeeb]   [Ali]*
   Eat-s is Apple   Ali
   V-InF Aux/3P/SG   OBJ/3P/SG
   SUB/3P/SP
   'Ali eats apple.'

The data noted in (a-d) suggests that Urdu is a free word order language, and shifting of arguments does not create any problems for understanding language. One most crucial point to be observed is that the function of categories did not alter dislocation. The *non-configuration* of categories functions after displacement is due to the pre-valuation of Theta features. The theta-roles of subject and object DPs have been marked while merging, and this displacement is not due to theta marking properties. Instead, it is some unique aspect of the Urdu language that has been ignored by scholars, especially in Pakistan. Mahajan (1997) posited that this shifting of arguments is not free hence; it is a case-driven movement because theta features of all the DPs are marked in local position while the case is marked after theta configuration. In 2000, Kidwai (2000) claimed that scrambling is not due to case-driven, while it is XP-adjunction within the derivation. Chomsky (2008) revisited all previous version of the Minimalist Program and ascertained that it necessitates theta marking for case-feature valuation. Firstly, if theta features cannot be marked within derivation, the case cannot be preceded. In this paper, we explain this free shifting of arguments purely constituted within only phase head because scrambled arguments are not crossing the boundary of CP (Chomsky, 1995, 2008).

e) *[Amei-ne] Zoya-ko Salgeera-ka [Toofa] dii-aa.*
   Mother-Erg –Acc birthday-Dat gift give-ed
   'mother gave Zoya a birthday gift.'

In example (e), we have two objects direct (toofa) and indirect (Zoya-ko). This is due to the nature of lexical verb as it is a ditransitive verb. It takes two objects DPs. Here in this example, Salgeera-*ka* is neither unique/independent DP nor adjunct, and it is the complement of direct object DP *toofa*. It has a binding relationship with the direct object, but it cannot have any binding relation with the indirect object DP Zoya-*ko*.

f) *Zoya-ko [Amei-ne] Salgeera-ka [Toofa] dii-aa*
   -Acc mother-Erg birthday-Dat gift give-ed
   'Mother gave Zoya a birthday gift.'

In this example (f), we noticed that the core object DP is toofa and subject DP is Amei-ne, but here indirect object DP Zoya-*ko* has been scrambled before the subject, but it did not create any ungrammaticality. This DP already valued its theta feature in the lower phase, and it did not necessitate any Case feature valuation because, in the lower domain, v bears Accusative Case. It has already assigned accusative case in the local domain, and its displacement is due to *scope sensitivity* that is the only feature of CP (Bhatt and Dayal, 2007) as Scope is the feature encoded in CP if we split the CP Projection. (Rizzi, 1990) In this way, it has been claimed that all the syntactic operations have been fully satisfied following all the principles- theta features, case within phases, and this shifting is only for *scope sensitivity* and it converges at interface levels.

g) *[Amei-ne] Salgeera-ka [Toofa] Zoya-ko dii-aa*
   mother-Erg   birthday-Dat gift
   -Gen   give-ed
   'Mother gave Zoya a birthday gift.'

In example (g), all the shifting and displacement of arguments are uniformed and structural within phases. Within the vP phase at theta, position *v* has assigned theta role and case to the indirect object DP Zoya-*ko*. Nevertheless, toofa salgeera-*ka* has binding relation, so it cannot be separated. Salgeera-*ka* has only one binding relation with direct object DP Toofa not even with indirect object DP Zoya-*ka*.

h) *Zoya-ko Salgeera-ka [Toofa][Amei-ne]   dii-aa*
   -Gen   birthday-Dat gift mother-Erg give-ed
   'Mother gave Zoya a birthday gift.'

i) *Zoya-ko [Toofa] Salgeera-ka [Amei-ne]   dii-aa*
   -Gen gift birthday-Dat mother-Erg give-ed
   'Mother gave Zoya a birthday gift.'

In these examples (h-i), we have noticed scrambling within the DPs-Salgeera-*ka* Toofa and Toofa Salgeera-*ka*. If postP did not move overtly for checking the genitive case feature of DP, it could not be met at interface levels. However, in example (8), it has moved at the Specifier of DP from NP's specifier position. In example (9), Salgeera-*ka* Postp did not move overtly, but it meets interface level no ungrammaticality is observed. We question that how the genitive Case has been valued. One possibility is that Salgeera-*ka* here can be an independent DP, not a complement of Toofa. The second option is that Salgeera-*ka* is not adjunct neither within DP nor CP level. It is the complement of the Nominal phrase, and it has binding relation with a direct object. In example (8), Salgeera-*ka* did not bind with Zoya-*ko* despite local.

j) *[Nooker-ne] jaldi-se [choha] pakar liya*
   servant-Erg quickly rat catch -ed
   'The servant quickly caught the rat.'

In example (j), we have an adjunct jaldi-se that is free. It can freely be placed either at pre or post position within verb, but no ungrammaticality has been observed. It can be said that in Asian Languages, *adjunction flexibility--* rightward or leftward is observed. Subject DP is nooker-*ne*, and object DP is choha. Here in this sentence, we have only one direct object, not even an indirect object. If we alter the position of adjunct jaldi-se, we only notice semantic *scope sensitivity*, not even syntactic problem. See the example (7-9); the semantic properties of the sentence have been shifted, but syntactically all the mechanisms have been fulfilled mutually within phases.

k) *[Nooker-ne]   [choha] jaldi-se pakar liya*
   servant-Erg rat quickly catch -ed
   'The servant caught the rat quickly.'

In the example (k), the direct object has been shifted overtly, but it is very difficult to assess what case does direct object DP possess? It can only be observed that -ne that has been attached with *nooker* makes it clears that it is neither subject DP nor object DP, but if we have two such DPs which do not have any overt case markers, how can we determine the case to mark subject and object position. One solution is *theta features* that ensure the arguments of what role they will play within the derivation *of the agent, theme, patient, and experience*. In this CP, paker selects *choha* to make VP, and null *v* selects this whole VP as a compliment. The EPP feature of *v* triggers a lower object whose theta feature has already been marked and puts it specifier position, and *v* has another potential, it possesses genitive case and agentive role (Agent) it introduces its external argument, i.e. *nooker-ne* and marked its theta role of the agent within the local domain.

Here at this position, our first phase has successfully been completed. The displacement of lower object DP to overt specifier position is due to *only* the phase head of *v*P. Dummy *v* light verb bears edge feature, and it regulates the further computation recursively. In the derivation, we have an unvalued case feature that must be valued, and T selects *v*P as complement and triggers lower caseless DP *nooker-ne* overtly and takes it at specifier position, and this place, T assigns nominative case from head to specifier. In this way, no syntactic feature has been left unchecked and unvalued within two phases, but only C, the head of CP, bears *scope features, finite feature, focus feature* and *wh-feature*. In Urdu, except for finite

feature, all other features are strong features due to these lower DPs moves.

5. Discussion

Scrambling is viewed in SOV languages as an extra operational device Mahajan (1990) and Kidwai (2000). They posited additional devices to account for scrambling, particularly in Hindi. Firstly, all the studies on the cognitive faculty of language-focused that humans' *output* is uniformed and hinges on some unified structure. A general theory of language is a generative paradigm (Chomsky, 2008) accounts for all the languages within the Minimalist Program (1995; 2002), and according to this theory, every individual is wired with a genetically endowed *bio-program* device that regulates the input and output on pair-fashion like PF and LF, not any external mechanism necessitates to regulate it.

So, if we view the data of all the languages whose word-order is either SVO or SOV within one and only principled theory of generativism, we must licitly concede that *scrambling* is also the by-product of the human speaker[s] who are also installed genetically the same *bio-program* that is encoded within the speakers' of English, Urdu, Persian and Italian languages. Therefore, scrambling must be uniformed and structural dependent within the language, and any additional device is unacceptable to account for scrambling. It is viewed as natural as a normal human speech in any language because it is also considered fully grammatical and acceptable by all the speakers of that particular language.

Many scholars endeavoured to account for this phenomenon in various languages—Hindi (Kidwai, 2000; Mahajan, 1990), Japanese (Miyagawa, 1997), Korean (Saito and Fukui, 1998) and less attention is paid to Urdu languages. Hindi and Urdu are similar languages according to general properties like phonology, morphology, syntax, and even semantics. Scrambling is due to some morphological reason like CASE valuation (Mahajan, 1990). The case is the essential property of language. Due to the strong feature, derivation cannot be computed unless the strong feature will not be eliminated from the derivation (Chomsky, 1995).

For Case valuation, Mahajan (1990) put forth the assumption of structural case marking as the structural case marking is controlled by AgrsP[2] and AgroP[3]. The point is that we suppose that these are the projections

---

[2] Agreement subject phrase= It is the projection that possesses some grammatical features that control the moving of subject position within the derivation.
[3] Agreement object phrase= the projection that regulates the objects and structural case marking of the object within the derivation.

with grammatical features within the derivation. We have similar other functional categories that regulate the derivation. They are C, the clausal head and the v lower phase head. Both of them have some grammatical and strong features that must be eliminated within the derivation.

For capturing the uniformity within Chomskyyan's Framework (2002), scholars tried to develop a unified system for scrambling. Based on Korean datasets, Saito (1988) suggested that it is *optional,* and Mahajan (1990) suggested it as "*Case drove and verb agreement,"* and that is marked by additional device Pollack model of IP and AGroP. Later, Kidwai (2000) assumed that it is XP-adjunction like other types of movements—Topicalization, Wh-movement etc. However, the question is that the data presented in section 4 demonstrates that agreement and case play no role if the argument DPs displace from base position to host position. The second motivates that XP-adjunction is not marked theta set from the external head rather internal head and not even Case as well; hence if we take scrambling as adjunctions, our data shows that all the DPs valued theta roles and case within a unified framework of minimalism. Within the domain phase heads CP and *v*P, how these grammatical features have been valued, marked and deleted, the option is these are marked by unique phase heads within the phase-based theory Chomsky (2002) satisfying the interface condition and economic condition.

The present study finds that scrambling within SOV languages like Urdu can be dealt with by employing minimalism without taking any additional device, keeping in view the economic condition and interface condition. Scrambling is not ungrammatical in all SOV languages. If we want to account for the data of Indo Aryan Languages, we must observe that two categories are phase heads C and *v* within the phase theory of Chomsky (2002). They uniformly control scrambling as both possess EPP and Case feature. Therefore, no AgrsP and AgroP entail the grammaticality of neither any pure or scrambled sentence in Urdu. In SOV languages C and v bear strong features, and if any strong feature remains in the computation unvalued, the derivation cannot be converged and cannot be mapped at the interface level. v firstly assigns theta-feature to argument DPs, and it has the potential to assign Accusative-Case from head to complement position. C also bears EPP and multiple other features like---*Q-feature, focus-feature, scope-features*, and *finiteness*. These features are also valued and deleted before spell-out (Chomsky, 1995), and no strong feature exists in the computation after spell-out. It is also evident that no additional AGRoP (Mahajan, 1990) is obligatory to account for

scrambling, and it has been eliminated because AGRoP is not a head that is a syntactically indivisible bundle of formal features (Matushansky, 2006 p. 70).

Chomsky (1986) and Tada (1993) favoured Structural Dependency and Uniformity within the clausal-internal. If we follow the traditions, every module of language must follow some abstract system at any level. System means an abstract underlying structure. According to the socio-linguistic point of view, Myers-Scotton (1997) postulated that mixed languages, what she calls Codeswitching, Code-mixing and borrowing, must follow uniformity of condition. Ali, Jabbar and Malik (2020) add that the ideas of mixing/switching and borrowing originated in sociolinguistics; it is thought to be an absurd and haphazard use of language, but later thought to be an unconscious effort of the mind and a part of human competence. If it is accepted that every module of language is systemic, we must follow the hypothesis of Uniformity and Structural Dependency within even scrambling as it is the output of an individual. Every individual only speaks grammatical sentences and strings.

Generativist theory (1995) has developed a unified mechanism for monolingual speakers and bilingual speakers (Malik, 2017). Those scholars also follow the uniformity and structural dependency within the clausal internal. The same theory can be applied to account for scrambling, too, with no additional device. To control uniformity within clausal internal is linearized by the phase heads, and they are C and v. These phase heads universally operate within monolingual data, bilingual data, and scrambling within this study.

6. Conclusion

Scrambling within clausal-internal is paralleled to Case-Driven and verb-agreement (Mahajan, 1990) and XP-Adjunction operation (Kidwai, 2000) within generativist theory. Here in this study, it has been predicted that scrambling is neither case-driven nor verb-agreement nor XP-adjunction; it is the motivation of strong phase heads (C_o) and (v_o). They license scrambling within the derivation, and no additional devices—IP, AGRoP and XP-Adjunction are essential because if we put the additional burden on human cognition, it will theoretically halt the system. In this way, the system will make crashes and map dis-uniformity within the derivation. Human speech is a by-product of involuntary actions (Ali et al., 2020) so, scrambling is not dis-uniformed, structural dependent, systemic and human cognitive faculty regulates all types shifting of argument positions only satisfying interface conditions-PF and LF.

7. Acknowledgement

References

Ali, A., Jabbar, Q., & Malik, N.A. (2020). No functional restriction and no fusion linearization on intrasentential codeswitching; a minimalist explanation. *Ijee.org*, 9(4)130-145.

Bailyn, J. F. (2020). The Scrambling Paradox. *Linguistic Inquiry*, *51*(4), 635-669.

Bailyn, J. F. (2001). On scrambling: A reply to Bošković and Takahashi. *Linguistic inquiry*, *32*(4), 635-658.

Bhatt, R., & Dayal, V. (2007). Rightward scrambling as rightward remnant movement. *Linguistic Inquiry*, *38*(2), 287-301.

Bayer, J., & Kornfilt, J. (1994). Against scrambling as an instance of Move-alpha.

Bošković, Ž., & Takahashi, D. (1998). Scrambling and last resort. *Linguistic inquiry*, *29*(3), 347-366.

Chomsky, N. (1995). Language and nature. *Mind*, *104*(413), 1-61.

Chomsky, N. (2008). On phases. *Current Studies in Linguistics Series*, *45*, 133.

Chomsky, N. (2014). *The minimalist program*. MIT press.

Chomsky, N., & Collins, C. (2001). *Beyond explanatory adequacy* (Vol. 20, pp. 1-28). Cambridge: mitwpl.

Chomsky, N., & Kenstowicz, M. (1999). Derivation by phase. *An Annotated Syntax Reader*, 482.

Chomsky, N., Belletti, A., & Rizzi, L. (2002). An interview on minimalism. *N. Chomsky, On Nature and Language*, 92-161.

Dayal, V. (1994). Binding facts in Hindi and the scrambling phenomenon. *Theoretical perspectives on word order in South Asian languages*, 237-262.

Farmer, A. K. (1980). *On the interaction of morphology and syntax* (Doctoral dissertation, Massachusetts Institute of Technology).

Grewendorf, G., & Sabel, J. (1999). Scrambling in German and Japanese: Adjunction versus multiple specifiers. *Natural Language & Linguistic Theory*, *17*(1), 1-65.

Haider, H. (1990). Topicalization and other puzzles of German syntax. *Scrambling and barriers*, *5*, 93-112.

Haider, H., & Rosengren, I. (2003). Scrambling: Nontriggered chain formation in OV languages. *Journal of Germanic Linguistics*, *15*(3), 203-267.

Kidwai, A. (2000). *XP-adjunction in Universal Grammar: Scrambling and binding in Hindi-Urdu*. Oxford University Press, USA.

Kitahara, H. (2000). Case and scrambling: A derivational view. *Ms., Keio University*.

Kiss, K. E. (2003). Argument scrambling, operator movement, and topic movement in Hungarian. *Word order and scrambling*, 22-43.

Kiss, K. É. (1994). Scrambling as the base generation of random complement order. *Studies on scrambling*, 221-256.

Mahajan, A. K. (1990). *The A/A-bar distinction and movement theory* (Doctoral dissertation, Massachusetts Institute of Technology).

Mahajan, A. (1997). Rightward scrambling. *Rightward movement*, 185-213.

Mahajan, A. (1994). Toward a unified theory of scrambling. *Studies on scrambling: Movement and non-movement approaches to free word-order phenomena*, 301-330.

Malik, N. A. (2016). Phase-based derivation of mixed sentences. *Sci. Int*, *28*(4), 409-412.

Malik, N. A. (2017). No mixed grammars, no phonological disjunction: A new perspective on intra-sentential code-switching. *Lingua*, *194*, 51-66.

Maqsood, B., Saleem, T., Aziz, A., & Azam, S. (2019). Grammatical constraints on the borrowing of nouns and verbs in urdu and english. *SAGE Open*, *9*(2), 2158244019853469.

Matushansky, O. (2006). Head movement in linguistic theory. *Linguistic inquiry*, *37*(1), 69-109.

Miyagawa, S. (1997). Against optional scrambling. *Linguistic inquiry*, 1-25.

Miyagawa, S. (2001). The EPP, scrambling, and wh-in-situ. *Current Studies in Linguistics Series*, *36*, 293-338.

Müller, G., & Sternefeld, W. (1994). Scrambling as A-bar movement. *Studies on scrambling*, 331-385.

Myers-Scotton, C. (1997). *Duelling languages: Grammatical structure in codeswitching*. Oxford University Press.

Neeleman, A. (1994). Scrambling as a D-structure phenomenon. *Studies on scrambling: Movement and non-movement approaches to free word-order phenomena*, *387*, 430.

Pollock, J. Y. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic inquiry*, *20*(3), 365-424.

Rizzi, L. (1990). *Relativized minimality*. The MIT Press.

Ross, J. R. (1967). *Constraints on variables in syntax*. [Dissertation, Univerity of Pensylvania] https://babel.ucsc.edu/~hank/ross67.pdf

Saito, M. (1992). Long distance scrambling in Japanese. *Journal of East Asian Linguistics*, *1*(1), 69-118.

Saito, M. (1985). *Some asymmetries in Japanese and their theoretical implications* (Doctoral dissertation, NA Cambridge).

Saito, M., & Fukui, N. (1998). Order in phrase structure and movement. *Linguistic inquiry*, *29*(3), 439-474.

Simpson, A., & Bhattacharya, T. (2003). Obligatory overt wh-movement in a wh-in-situ language. *Linguistic Inquiry*, *34*(1), 127-142.

Tada, H. (1993). *A/A-bar partition in derivation* (Doctoral dissertation, Massachusetts Institute of Technology). https://dspace.mit.edu/handle/1721.1/12677

Vikner, S. (1994). Scandinavian object shift and West Germanic scrambling. *Studies on scrambling: Movement and non-movement approaches to free word-order phenomena*, (pp, 487-517). New York. Mouten De-Gruyter.