



Research Article

## On Multiple Agreement in Urdu Language: A Cyclic-Agree Account

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### Abstract

This study investigates morphosyntactic agreement in the Urdu language utilizing a qualitative descriptive approach, gathering naturalistic data, and employing a Cyclic Agree (Béjar & Rezac, 2009) as a theoretical framework. Focusing on compound verb constructions, double-object construction, and compound verb constructions, this study examines how agreement is constrained by case accessibility, clause structure, and probe-goal interactions. The data reveals that ergative subjects in perfective contexts are specifically opaque to agreement probes, which instead target accessible internal arguments—often yielding object-controlled agreement. Ditransitive constructions consistently support agreement with the head noun via syntactic binding, even in the absence of overt nominal presence, thereby supporting movement-based analyses. By applying Cyclic Agree to Urdu's split-ergative alignment and complex clause architecture, the study contributes to broader typological and theoretical debates on agreement displacement, locality, and feature inheritance in South Asian languages.

Keywords: Case-marking, Cyclic agree, Split-ergativity, Probe-goal interaction.

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## Introduction

Case marking is a fundamental concept in syntactic theory, serving as a morphosyntactically mechanism that entirely determines the grammatical concatenation between verbs (Vs) and noun phrases (NPs) within a sentence (Ali et al., 2023a; Fillmore, 1967; Legate, 2006, 2008). Across world languages, case-marking and case-checking systems significantly diversify depending on syntactic categories—do vary based on syntactic categories and their morphosyntactic properties (Boeckx, 2004; Chomsky, 1995). While extensive research has dedicated to agreement phenomena in Asian languages (e.g., Ashraf et al., 2021, 2025; Ali et al., 2020, 2023b; Butt, 2014; Boeckx, 2004; Den Dikken, 2011; Ilyas et al., 2023; Bittner & Hale, 1996; Gallego, 2010; Deal, 2016; Bjorkman & Zeijlstra, 2019; Bjorkman, 2018), the intricacies of multiple agreement in Urdu—a split-ergative and complex predicate language—remained underexplored. Consider (1a-1c).

- |  |                                      |
|--|--------------------------------------|
| 1a. <i>I</i> walk every day.             | [1 <sup>st</sup> Person: Nominative] |
| 1b. <i>You</i> cook mutton.              | [2 <sup>nd</sup> Person: Nominative] |
| 1c. <i>They</i> finished the assignment. | [3 <sup>rd</sup> Person: Nominative] |

In examples (1a-1c), nominative case is assigned to NPs, *I*, *You*, and *They* at the subject position.

- |   |                                      |
|---|--------------------------------------|
| 2a. The boy called <i>me</i> yesterday.   | [1 <sup>st</sup> Person: Accusative] |
| 2b. She loved <i>you</i> .                | [2 <sup>nd</sup> Person: Accusative] |
| 2c. You spoke to <i>them</i> after class. | [3 <sup>rd</sup> Person: Accusative] |

In the above demonstrated examples (2a-2c), accusative cases are marked. The consider the examples (3a-3c).

- 3a. This is *my* book. [1<sup>st</sup> Person: Possessive]  
 3b. She loved *you*. [2<sup>nd</sup> Person: possessive]  
 3c. You spoke to *them* after class. [3<sup>rd</sup> Person: Possessive]

In examples (3a-3c), possessive cases are demonstrated in English. According to Chomsky (2000), *agree* single probe establishes its relation based on theta feature to the goal (Cable, 2007; Chomsky, 2005). How can it be possible if there are multiple goals in the local domain (Abney, 1987). Now consider the example (4). According to Legate (2008), English does not exhibit morphological case stacking as it is observed in Urdu, Japanese and Korean.

4. *She* gave *me* John's book.

In (4), we have only two probes but three goals. How can it be possible to agree with single goal. In this way, the theory of Chomsky (2000) remained blunt and redundant to assign additional case to the caseless DP. For instance, get example from Hindi-Urdu (5).

5. Raam-ne vah kitaabē paṛh-ii th-ī.  
 Raam-ERG those books(F) read-(PFV)F.PL be.PST-F.PL  
 'Raam had read those books.' (Bjorkman and Zeijlstra 2019, p. 545)

In (5), the verbal construction consists of a periphrastic perfective form, *parhii thii*, wherein the participial *parhii*, shows agreement in both number and gender with plural feminine noun phrase *vah kitaabe*, (those books), which itself appears in a morphologically unmarked case. Concurrently, the auxiliary *thii* aligns with the same noun phrase, showing concord in person, number, and gender. The external argument *Raam-ne*, (Raam) bears ergative marking, thereby occupying a structurally superior position relative to the internal argument. Given the hierarchical inferiority of the internal argument in relation to both the external argument and the two  $\phi$ -feature probes—namely *v* and *T*—the inquiry emerges as to how such featural dependency may be reconciled within the confines to a strictly uninterpretable agreement system.

This study provides a comprehensive analysis of case-marking system operating within Urdu morphosyntactic layer of a sentence employing a generative framework that decomposes the syntactic architecture into discrete, units. By employing such method, the study aims to provide the intricate mechanism underlying case assignment, specifically as they manifest in a linguistic system distinguished by its elaborate morphological inventory and syntactic idiosyncrasies (Jabbar et al., 2021). Within this context, case is theorized as a morphosyntactic phenomenon through which grammatical categories—specifically verbs, preposition, noun phrases—are interrelated in a unified way that encodes their respective syntactic functions and hierarchical dependencies. Consider the dependencies in (6).

6. Fatima's father is a doctor.

Possessive constructions in English are particularly marked by additional morphological marker, an apostrophe, whereas Urdu, employs different clitics such as *-ki*, *-ka*, and *k* as exemplified in (7a-7c).

- 7a. Qatadah-*ki* ammi khana bnatii hai.  
 Qatadah-POS mother meal cook-INF. be.  
 "Qatadah's mother cooks meal."  
 7b. Hum Ali-*k* gaar gaye.  
 We.1. PL Ali-POS. 3. SG home be. PST. PL  
 "We went to Ali's home."  
 7c. Yeh mere bhai-*ka* gaar hai.  
 This my brother-POS.3.SG home. 3. SG be. PRS.  
 "This is the house of my brother."

In the above stated example (7a-7c), different types of case markers are employed to mark case in Urdu, and

they are placed at different positions and special case markers in Urdu despite English. The clitics instantiate agreement between probe—functional category and a goal—DP satisfying structural constraints including case-filter (Chomsky, 1957, 1995; Béjar & Rezac, 2009)

### Research Questions

RQ1: What types of case-marking patterns appear in Urdu grammatical sentence construction?

RQ2: How do morphological particles—clitics help in case marking in Urdu sentence construction?

RQ3: How do case-markers in Urdu work within *cyclic agree* theory to exhibit agreement?

### Literature Review

Case marking is a process of morphologically encoding NPs to indicate their syntactic and semantic roles in each sentence (Ali et al., 2021a). It is a device used by languages to encode information about the connection between NPs and the verb or the other constellation (Chomsky, 1995, 2014). Case systems differ greatly across languages from highly developed inflectional systems to languages with hardly any case markings (Chomsky, 2014). Vergnaud (2008) asserted that *the distribution of the overt lexical NPs in X was the same as the distribution of elements that bear Governed Case.*” Building on this, Chomsky (1981, p. 49) introduced case filter categorizing case into abstract case and morphological case. Abstract case is a formal syntactic feature, and morphological case is realized on morphological level (Niaz & Ali 2023; Saram et al., 2023). He further claimed that abstract case plays pivotal role in nominal licensing, appearing on the Case Filter.

#### Case Filter:

“A lexical NP must be assigned (abstract) Case. (Chomsky, 1981, p. 49)

According to this framework, every NPs must receive abstract case.

8. It seems John to be happy.

In (8), John is the part of embedded non-finite clause, the sentence will be ungrammatical unless it is assigned case. At matrix clause, T, assigns it as an abstract case. This case assignment remained under discussion and many scholars as Zaenen et al. (1985), Marantz (2000), McFadden (2004), and Preminger (2011, 2014) have questioned the necessity and universality of abstract case and case-licensing. They proposed alternative licensing mechanisms such as incorporation and thematic licensing (Massam 2001; Danon, 2006; Wiltschko, 2014; Levin, 2015; Sheehan & van der Wal, 2018). These scholars proposed the more appropriate and cross-linguistically diversified theoretical framework for case-assignment. In addition, Marantz (1991) splits case-assignment (e.g., Chomsky’s Case Filter) suggesting that *case is not assigned by heads but is a property of the distribution of NPs in a local domain.*” It means that case is assigned relationally, the lower NP gets accusative case and upper NP receive nominative case; hence, no need for structural and morphological case distinction in the syntactic theory. This model of case-assignment is called dependent case-assignment model. Consider the example (9).

9. She loves him.

10. The child ran.

In (9), two NPs higher (She) and lower (him), they have their relative position which marks their case at the structural relation. She (Nominative) while him (Accusative). In (10), there is only one NP, therefore, it gets nominative case because there is no dependent NP in the derivation.

#### Agreement

Agreement is an operation in syntax through which an unfreeze NPs receives case based on lexically encoded features. Chomsky (2000) introduced agreement mechanism. *Agree* is an operation that establishes a relation between a *probe* { $\phi$ } and a *goal* {NP}, where the probe has unvalued features { $\pm$ PERSON,  $\pm$ NUMBER,  $\pm$ GENDER} and the *goal* has matching valued features {NPs}.



Ali et al. (2025) investigated the agreement in Urdu relative clauses, arguing that syntactic structures, case-marking, and verb agreements, particularly in split-ergative alignment languages is flexible and morphologically complex. In relative clauses, verb typically agrees with noun of the relative clause with respect to gender and number regardless of whether that noun is overtly present within the clause or lined via a relative pronoun—*jo*. This agreement pattern supports the analysis of relative clauses in Urdu involves movement and binding, where the head noun controls agreement. In addition, ergative case-marking in perfective context can be transformed from subject to the object, further complicating the agreement pattern within relative clauses. These properties make Urdu a valuable language for the scholars to test the theories of agreement, locality, and feature inheritance.

Despite the extensive research on Urdu syntax, and its sub-domains, such as applicative construction, scrambling, internally headed clauses, and long-distance agreement (LDA), there is a significant research gap observed across agreement theory, naturalistic methodology, and empirical dimensions. While exiting research has explored minimalism, and lexical functional grammar, they often overlook advanced models such as Cyclic Agree and Dependent Case Theory that could present a more unified account of clausal level. Addressing this research gap, this study contributes to multiple agree-based model that account for ergative constructions, compound verb constructions, and double-object construction.

## Research Methods and Materials

### Research Design

This study adopts a qualitative descriptive research method to investigate agreement in Urdu, extending on ergative construction, double-object construction, and compound verb construction. Qualitative descriptive research methodology based on “*theoretical of the qualitative approaches. They offer a comprehensive summary of an event in the everyday terms of those events*” (Sandelowski, 2000, p. 336). This research methodology is very suitable for the current study as it is based on a theory of agreement and a model of agreement Cyclic Agree framework—this study aims to provide an empirically grounded and theoretically informed account of agreement phenomena in Urdu.

### Data collection

For data collection, the study employs one the field-based method—audio-recording from the students at the University of Lahore, Sargodha Campus in campus setting. Audio-recording is made using discreet high-quality digital devices, strategically placed among the students ensure a clear voice while participating comfort. Recorded data is transcribed using ELAN software, with annotations focuses on syntactic features such as agreement, case-marking and clausal structure (Dar et al., 2024; Embick, 2000). All data is verified from two independent experts to enhance the validity and credibility of sample selections.

## Data Analysis

### Multiple Agreement in Urdu Ergative Constructions

Multiple Agreement is observed in ergative constructions in (12-15) which show different patterns of agreement in the ergative constructions.

12. Ali-ne novel parhaa.  
 Ali-ERG.3. SG. MAS novel.3. SG. MAS read-INF.3. SG. MAS  
 “Ali read a novel.”
13. Ali-ne novel-ko parhaa.  
 Ali-ERG.3. SG. MAS novel-DAT.3. SG. MAS read-INF.3. SG. MAS  
 “Ali read a novel.”
14. Sara us-ee jaan-ti hai.

She.ACC her know.PRES.3.SG.FEM

“Sara knows her”

15. Mujhe ye novel pasand hai.

I.DAT this book.NOM liked. Be PRES.3.SG.FEM

“I like this novel.”

The examples (12-15) taken from Urdu language, show the agreement is shaped by case accessibility and hierarchical structure (Béjar & Rezac, 2009). In (12), *Ali-ne* is ergative NP which is inaccessible to agreement, promoting the probe to target the closest object—whether it is normative or dative—depending on clausal structure. (14) shows that *Sara* is the closest goal, triggering subject-verb agreement, while the accusative object remains inert. Similarly, in (15), dative experiencer DP, *mujhe* resists agreement, permitting the probe to agree with nominative object *ye novel*. The data supports Cyclic Agree’s assumption that probes may re-evaluate goals based on features compatibility and locality.

### **Multiple Agreement in Urdu Compound Verb Constructions**

Verbs play very crucial role in agreement, and they exhibit different nature including intransitive verbs, are categorized as unaccusative and unergative. As there is no internal argument, the verb assigns the external argument to the role. Consider the examples (16-19) for compound verb constructions.

16. Qatadah-ne roti paka kar khai.

Qatadah-ERG bread. FEM cook.PERF.FEM LVB.PERF.FEM

“Qatadah cooked and ate the bread.”

17. Larkon-ne kitabeein parh kar wapis ki.

Boys-ERG books.FEM read. PERF.FEM LVB.PERF.FEM return.PERF.FEM

“The boys read the books and returned them.”

18. Ali gaar jata raha.

Ali. NOM home go.IMP.MASSC continue.PERF.MASC

“Ali kept going home.”

19. Ali-ne roti khaa kar Khushi mehsoos ki.

Ali-ERG bread.FEM eat.PERF.FEM do.PERF.FEM happiness.FEM feel.PERF.FEM

“Ali ate the bread and felt happiness.”

In example (16), ergative subject, *Qatadah-ne* is in a perfective clause, making it inaccessible for agreement. The probe instead agrees with the feminine object *roti*, reflected in the feminine agreement on all verbs (*paka, kar kha*). This supports the Cyclic Agree, where the probe bypasses the ergative subject and targets the accessible internal argument. In (17), subject *larkon-ne* is masculine plural, the verb agrees with the feminine plural object *kitabeein*. Again, the ergative subject blocked to target subject DP, showing agreement displacement consistent with Béjar and Rezac’s model. In (18), the verb agrees with nominative subject *Ali*, as this clause is non-perfective and intransitive. Since there is no internal argument, the probe agrees with the external argument, which is accessible and bears nominative case. This reveals how ergative verbs allow subject agreement when no completing internal goal is present. In (19), the ergative subject *Ali-ne* is inaccessible for agreement. The probe first agrees with feminine object *roti* and then with *Khushi*, another feminine noun introduced in the second predicate. This shows multiple probing and agreement with successive accessible goals, demonstrating the Cyclic Agree model’s proposition. The cited examples show how Urdu agreement patterns, especially in compound verb construction, are governed by case accessibility, argument hierarchy, and feature matching, all central to Béjar and Rezac’s Cyclic Agree framework.

### Multiple Agreement in Double-object Constructions

Double object constructions have been analyzed in this section through segmented-based framework (Béjar & Rezac, 2009). Data observed how agreement in Urdu is mediated by case accessibility, argument hierarchy, and feature compatibility. According to Cyclic Agree, a probe (e.g., T or v) searches for a goal with matching  $\phi$ -features (person, number, gender) and may re-probe if the first goal is inaccessible due to case or structural position. For this consider the examples (20-23).

20. Qatadah-ne bache-ko kitab di.

Qatadah-ERG child-DAT book.FEM give.PERF.FEM

“Qatadah gave the child a book.”

21. Aqsa-ne larkī-ko khaat likhee

Aqsa-ERG girl-DAT letters.FEM.PL write.PERF.FEM.PL

“Aqsa wrote letters to the girl.”

22. Ap-ne mujhe paighām bhejā.

You-ERG me.DAT message.MASC send.PERF.MASC

“You sent me a message.”

23. Aqsa-ne Haziq-ko tofa de kar khushī mehsoos kī.

Aqsa-ERG Haziq-DAT gift.MASC give.PERF.MASC do.PERF.FEM happiness.FEM feel.PERF.FEM

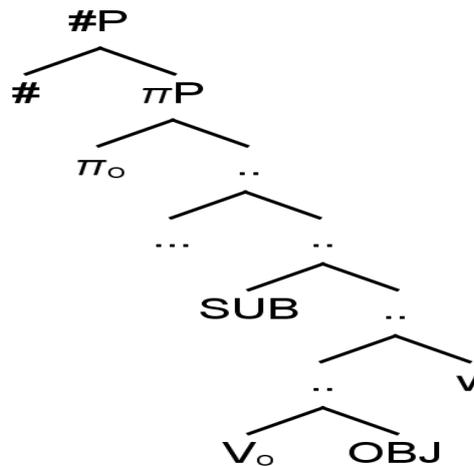
“Aqsa gave Haziq a gift and felt happiness.”

In (20), the ergative NP *Qatadah-ne* is depicted in a perfective clause. It is thus inaccessible for agreement as well. The probe targets the accessible internal argument *kitab* (feminine), resulting in feminine agreement on the verb *di*. The dative recipient *bache-ko* does not control agreement. In (21), verb *likhee* agrees with the feminine plural theme *khaat* not with dative recipient *Larki-ko*. Again, the ergative subject is blocked from agreement process and probe successfully targets the accessible theme, depicting number and gender agreement. (22) shows that *bheja* agrees with the masculine theme *paigham*, while the dative recipient *mujhe* remains inaccessible. The ergative subject *ap-ne* is relationally too high or inaccessible for agreement, therefore the probe settles on the internal argument. In (23), it is noticed multiple agreement across a compound verb construction. The first verb *de* agrees with the masculine theme *tofa*, while the second verb *mehsoos kī* agrees with the feminine abstract noun *khushī*. This reflects Cyclic Agree’s capacity to re-probe across phases, targeting different accessible goals based on clause structure and feature compatibility. In sum, the data revealed in (20-23) demonstrate that Urdu double-object constructions, agreement typically accesses the theme object despite the dative recipient, and the ergative subjects in perfective clauses are generally inaccessible for agreement. Béjar and Rezac’s model (2009) accounts for these patterns by emphasizing the role of case accessibility and cyclic probing in determining agreement targets.

### Discussions

This study shows that agreement in Urdu is totally influenced by case accessibility, clausal structure, and interaction between external and internal argument DPs. Consistent with Béjar and Rezac’s Cyclic Agree model, agreement is structurally probes in Urdu often bypasses ergative subject DPs in perfective clauses, instead targeting accessible internal arguments such as nominative or dative objects (Baker, 2009). This structural pattern is evident in both transitive and compound verb, and double-object constructions. Furthermore, the results of this study reveal and extend the existing literature on agreement in Urdu syntax, specifically regarding case accessibility. Consistent with Butt and Sadler (2003), the data of this study display that in perfective clauses, agreement typically matches with internal argument—most often the direct object—rather than the ergative-marked subject (Alnuzaili et al., 2024, 2025). These structural patterns of agreement are empirically evident in examples (16), where the verb agrees with the feminine object *roti*, and not with ergative subject *Qatadah*. Likewise, in double-object construction in (21), the verb shows agreement with

theme (*khaat*) rather than the dative recipient (*larkī-ko*), reinforcing Butt and Sadler’s instantiation that agreement in Urdu is sensitive to verb type and clause structure.



In this way, the findings also provide empirically strong evidence with Bhatt’s (2005) analysis of Long-Distance Agreement (LDA), particularly in constructions where embedded clauses lack overt subjects and allow agreement with distant objects. In the example (24).

- 24. Mujhe roti khani hai,
- I.DAT.2.SG bread. eat be.
- “I have to eat bread”

The matrix verb *hai* agrees with the embedded object *roti*, despite its structural long distance. In This way, this analysis affirms Bhatt’s claim that transparency between clauses enables agreement across boundaries, a phenomenon that challenges traditional locality constraints and aligns with Cyclic Agree’s re-probing mechanism (Béjar & Rezac, 2009).

By applying Béjar and Rezac’s Cyclic Agree model, this study offers a unified account of agreement behavior across diverse Urdu constructions, addressing gaps in previous literature that relied primarily on Minimalist or LFG frameworks (Alghamdi et al., 2023). Our naturalistic data collection further strengthens the empirical foundation of these findings, contributing to a more comprehensive understanding of agreement, locality, and feature inheritance in South Asian syntax.

### Conclusions

In sum, it is concluded that this study contributes to predicting multiple agreements in Urdu by providing a theoretically grounded and empirically well-defined analysis of Urdu clauses, compound verbs, and double-object constructions. Employing a qualitative research design and accumulating naturalistic data from Urdu native speakers, the study confirms that agreement in Urdu is controlled by case hierarchy and clausal structure, with ergative subjects often inaccessible and internal arguments facilitating as primary agreement domain. Segmented-based model offers a compelling explanation for these patterns, exhibiting the role of re-probing and feature compatibility in agreement. These findings not only deepen our understanding about Urdu syntax but also give insights into broader theoretical debates on agreement locality, restructuring, and syntax-semantic interface. Future research could be conducted to expand this analysis on incorporating dialectal variation, experimental syntax, or corpus-based modeling to further refine our understanding of agreement in South Asian Languages.

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## Conflict Statement

Authors declare no conflict of interest.

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