



Research Article

Concord Asymmetries in Urdu Nominalization

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Abstract

This study investigates concord asymmetries in nominalization of Urdu, a head-final language (e.g., YP- X_0), which is structurally complex and morphologically rich. Adopting a qualitative descriptive research design, this study employs Bayrih's (2017) theory of concord generalization, Pesetsky's (2013) Feature Assignment (FA) framework, and Koopman's (2003) functional projection principle. The findings reveal that Urdu represents a partial concord hierarchy. Urdu consistently demonstrates number, gender concord extending from adjective + noun, and demonstrative + noun structures, whereas case concord is absent. Case features are blocked at the NP phase boundary and highlighted externally via postpositions; however, the number and gender features are consistently merged, copied, and projected onto modifiers. The outcomes raised challenging questions regarding the feature percolation framework developed by Norris (2014, 2017) in accounting for the Urdu nominal structure, demonstrating that the concord in Urdu is hierarchically restricted and typologically predictable. Thus, this study contributes to the theoretical typology of concord by representing Urdu within the hierarchy of concord features and showing the structural operationalization systems that construct partial concord systems in head-final languages.

Keywords: Concord hierarchy, Feature agreement, Phi-feature, Partial agreement, Projection.

Introduction

The purpose of this study is to investigate concord asymmetries in the syntax of Urdu nominal constructions by operationalizing the fundamental principles of language design from the generative paradigm (Chomsky, 1995, 2000, 2014; Dar & Ali, 2026; Jabbar & Ali, 2026). Building on unified approaches to agreement and concord (e.g., Ali et al., 2026; Anderson 1992; Alok & Baker, 2022; Baker, 2008; 2013; Boeckx & Piattelli-Palmarini, 2005; Banerjee 2019; Przepiórkowski, 2024), this study is an attempt to resolve empirical "puzzle" identified in exiting literature (e.g., Giannakidou, 2000; Herburger, 2001; Kidwai, 2022; Bhattacharya, 2022; Winchester, 2019) and examines competing formal accounts of agree and non-agree as they employ to Urdu (Gambarage & Matthewson, 2022; Grimshaw, 2005; Jabbar et al., 2021). Focusing on Urdu nominal construction, this study questions how formal syntax licenses concord when modifiers and heads appear to carry incompatible phi-features. Consider examples (1-8) from the English agreement mechanism.

1. *This apples.
 this.SG apples.PL
 'these apples'
2. *That children are noisy.
 that.SG children.PL are noisy
 'Those children are noisy.'
3. *These child is sleeping.

- these.PL child.SG is sleeping
 ‘This child is sleeping/These children are sleeping.’
4. *A those books are mine.
 a.SG those.PL books.PL are mine
 ‘Those books are mine.’
5. *This people like pizza.
 this.SG people.PL like pizza
 ‘These people like pizza.’
6. *My those friends arrived late.
 my.SG those.PL friends.PL arrived late
 ‘Those friends of mine arrived late.’
7. *This pair of shoes is broken.
 this.SG pair.SG of shoes.PL is broken
 ‘These pair of shoes.’
8. *That scissors is dull.
 that.SG scissors.PL is dull
 ‘Those scissors are dull.’

The above-demonstrated instances (1-8) in English show that demonstratives (in 1) and determiners (in 4) require the phi-feature concord with their noun: probes on determiners to value number and gender features from nouns; consequently, such mismatches between probe and goal yield ungrammaticality. Examples (1,2,5) show that singular demonstratives cannot license plural nouns and vice versa. Such asymmetry reflects the locality and feature-matching constraints in the English agreement mechanism (Baker, 2008). Cross-linguistic contrasts (e.g., 9-13) reveal alternative licensing strategies.

9. ach-i lark-iyan
 good-F.SG girls-F.PL
 ‘good girls’
10. woh ach-i lark-iyan
 that.F.SG good-F.SG girls-F.PL
 ‘those good girls’
11. mera larka
 my.M.SG boy.M.SG
 ‘my boy’
12. meri larkiyan
 my.F.SG girls.F.PL
 ‘my girls’
13. kuch ach-i lark-iyan
 some.F.SG good-F.SG girls-F.PL
 ‘some good girls’

In (9-13), Urdu follows an additional morphology encoded in modifier (ZP) and head (X_o) mismatches: adjectives, demonstratives, quantifiers, and possessives can show gender (-i, -a) or number morphological (-a, -i) clitics, while the noun is plural (-iyan). This reflects underspecified exponence, split morphology, or agreement mediated by determiners rather than direct noun probing, allowing surface asymmetry, unlike the strict English concord system. Data from English (1-8) and Urdu (9-13) invokes that agreement is commonly

characterized as a phi-feature relation between two syntactic heads within a local domain (Chomsky, 2001; Perminger, 2014;). Concord is the instantiation of such relations in the nominal domain between a head (X_0) noun and its modifiers (ZP) (Wechsler, 2011; Perminger, 2014; Sobin, 2014; Watanabe, 2004; Norris, 2014; 2017; Bayırlı, 2022).¹ Chomsky (2001, p. 16) suggests that “there is presumably a similar but distinct agreement relation concord, involving merge alone,” a remark that captures the central theoretical puzzle raised in this study: Is nominal concord eliminable to the traditional probe–goal mechanism (operation—Agree) that accounts for subject–verb agreement, or does it necessitate a distinct mechanism? Competing positions in the literature reflect this divide: proponents of a unified Agree mechanism (Kramer, 2009; Danon, 2011; Carstens, 2000, 2001, 2011; Ali et al., 2023)² argue for a single explanatory device, whereas non-Agree accounts (Giusti, 2008; Norris, 2014; Polinsky, 2016) posit distinct operations or merge-based licensing for nominal concord.

Urdu has been the remained extensive syntactic inquiry—adjunction and scrambling (Mahajan, 1990), proposal on “no mixed” grammar (Malik, 2015, 2017), NP-scrambling (Ali et al., 2021a; Aqsa, 2023), intra-clausal switching (Ali et al., 2020, 2021b; Alnuzaili et al., 2025; Alghamdi et al., 2025;), subject properties (Kidwai, 2022), participials (Sharma, 2023), split aspectual agreement (Ali et al., 2023; Ilyas et al., 2023), and other phenomena (Alghamdi et al., 2026; Rayyan et al., 2020; Alshamari, 2022; Saram et al., 2023; Alnuzaili et al., 2024; Hallman, 2024; Haug & Nikitina, 2016). Despite this breadth, split nominalization and its concordive behavior remain underexplored in Urdu, leaving an empirical gap crucial for adjudicating Agree- and non-Agree-based accounts³. Consider the examples in (1) from English and (9) from Urdu repeated below in (14-15).

14. ach-i lark-i-yan
 good-F.SG girls-F.PL
 ‘good girls’
15. *This apples.
 this.SG apples.PL
 ‘these apples’

In example (14), a surface mismatch in phi-morphology—an adjectival form bearing an overt feminine marker *-i* coexisting with a plural feminine noun—the phrase is grammatical in Urdu. Example (15) shows the parallel in English blocked by demonstrative agreement. Such contrasts exemplify concord asymmetry: the same conceptual relation (modifier–head concord) is realized differently across languages and constructions, suggesting language-specific licensing conditions that a theory must capture (cf. Baker, 2008; Norris, 2014, 2017; Matushansky, 2019). Despite extensive syntactic research on Urdu, split nominalisation and its interaction with nominal concords have received less scholarly attention. Theoretical models developed for conjunct and subject/object asymmetries have not been systematically utilized to analyze complex nominal conditions in Urdu (Asad & Sidra, 2023; Ali et al., 2025a; Ali, 2025). Consequently, theoretical debates persist: Urdu’s frequent modifier–head mismatches could either support a unified Agree mechanism or represent distinct, non-Agree licensing operations (Dar et al., 2024; Ali et al., 2025b; Akram et al., 2025). Resolving this issue is pivotal because nominal concord asymmetry in Urdu offers a decisive testing ground and bears claims about the architecture and computational design of the faculty of language in the syntactic domain⁴. Keeping

¹ The studies on concord have been dedicated with many aspects such as nominal level, clausal level, negative concord and aspect concord etc. However, this study focuses on nominal domain of concord and did not include negative concord.

² Ilyas et al., (2023) dedicated English conjuncts agreement in the specific pattern that observed in English newspapers.

³ Concord varies in language to language. Urdu is free-word-order language, and it exhibits a very interesting properties of concord.

⁴ Agreement is occurred within two categories as soon as two mutual compatible features (formal properties) interact.

1. John eats a banana. [John_{DP}, [-ST, [John_{DP} [eat_V, a banana_{DP}]]]]
 2. *They eats a banana. [They_{DP}, [-ST, [They_{DP} [eat_V, a banana_{DP}]]]]

this in mind, this study formulated two research questions.

RQ₁: What concord mechanism do operate in Urdu nominal structure?

RQ₂; How does the concord surface in Urdu when modifiers and head nouns bear apparently incompatible phi-features?

Literature Review

Agreement has remained a central debatable topic in formal generative syntax, particularly defined as a syntactic relationship between two (probe-goal) entities that exploit phi-features, such as gender, number, and person (Béjar & Rezac, 2009; Cinque, 1994; Den Dikken, 2011; De Angelis, 2024; Marantz, 2013; Mare, 2023; Marten, 2005; Yuan, 2023). This mutual association is structurally demonstrated and manifests as mutual compatibility between syntactic elements, most commonly finite verbs, and their arguments. For instance (16-21), in English, finite verbs agree with their subjects in terms of number and person, as illustrated by examples (16-21).

16. Ahmad runs.

17. *Ahmad run.

18. They run.

19. *They runs.

20. Ahmad is tall.

21. *Ahmad are tall.

In finite clauses (16-19), Ahmad and They, NPs bear phi-features that agree with the corresponding finite verb. This instantiation demonstrates clausal concord, while examples (14-15) illustrate nominal concord. Crucially, not all agreement relations are equally sensitive to phi-features across syntactic domains, extending the diversification in how agreement functions depending on the syntactic operationalization domain (Béjar & Rezac, 2009; Yuan, 2023; Salzmänn, 2020).

Within the domain of generative grammar, several scholars have clearly defined a distinction between traditional agreement, particularly involving subject-verb or object-verb agreement, and concord (nominal concord), which involves quite different syntactic categories and mechanisms (Bonet, 2018; Chatzikiyriakidis & Gibson, 2017; Deal, 2016; Endo et al., 2019; Shen, 2018). Furthermore, clausal concord is also referred to as an agreement between an adjectival predicate and its argument at the clause level (for instances 20-21), whereas nominal concord refers to the agreement between a modifier and the head noun within the nominal domain (for instances 14-15). This split system of agreement highlights that concord (henceforth nominal concord) functions following distinct syntactic phi-features rather than traditional phi-features, as agreement proper involves.

Within the domain of concord (nominal concord), it has attracted scholarly attention in Western and modern descriptive grammar. It has received comparatively less attention in generative tradition. Chomsky (2001, p. 16) describes concord as “a similar but distinct agreement relation... involving Merge alone,” locating it as related to but distinct from agreement proper. Hiraiwa (2005) similarly observed that concord falls under the broader domain of agreement but has not been explored with the same theoretical depth. Generative studies have prioritized subject-verb agreement, putting aside concord under theory (Chomsky, 2014). Baker (2008) significantly contributed to agreement advancing a unified theory and stated that “agreement is the

[TP T	[VP DP]]
[uφ: number]	[iφ: number, person]
	[uT: __]

This is agreement as the singular DP in English takes singular overt inflection to mark the morphological requirement. But in example (2), it is ungrammatical as the plural DP does not require any overt inflection morphology in English due to which agreement blocks and the derivation crashes.

grammatical phenomenon in which the form of one item forces a second item in the sentence.” For instance (22-23).

22. The horses are galloping.

23. The horses are fast.

In examples (22), the NP, *the horse* agrees with the verb but in (23) adjective, *fast* does not inflect, but in languages with adjectival agreement, the adjective would show plural concord. In this way, “*adjectival agreement shows that concord is not limited to verbs but extends to other lexical categories.*” by extending this concord within the generative framework (Chomsky, 1995, 2005, 2014). Baker (2008, 2013) employed a lexical category distinction mechanism, emphasizing adjectival agreement in both attributive and predicative contexts. Subsequent scholarship shifted the focus to Nominal Concord (NC), where modifying elements such as demonstratives, numerals, quantifiers, and adjectives reflect the features of the head noun. This line of inquiry was followed by Mallen (1997), Carstens (2000, 2001, 2011), Kramer (2009), and Norris (2014, 2017), each working within different theoretical frameworks. Collectively, these studies have contributed to the understanding of concord as a distinct syntactic phenomenon, highlighting its association with the broader architecture of agreement. In addition, Carstens (2000) worked in the Kiswahili language within the minimalist theory (1995), establishing a core syntactic process rather than a superficial morphological phenomenon for concord. Carstens (2000) argues that concord is mediated by syntactic feature checking. Adjectives and case-marked phrases carry uninterpretable phi-features (gender, number, noun class), which must be checked against the noun employing movement. For example, in Eq. (24).

24. *wa-toto wa-kubwa*

2-big 2-children,

“big children”,

In (24), the adjective *wa-kubwa* bears the same noun class prefix as *wa-toto*, exhibiting concord through movement and feature checking. In 2001, Carstens extended her analysis to Bantu languages, highlighting that noun-class features regulate the concord across the DP. Modifiers such as adjectives, numerals, and determiners must bear the same noun-class prefix as the head noun. For example, in (25).

25. *wa-toto wa-wili*

2-two 2-children”

“two children”

In (25), it is demonstrated how the numeral *wa-wili* agrees with the noun *wa-toto* in the noun class, showing concord across DP elements. Extending this to the labeling mechanism, Carstens (2011) articulated that concord within the architecture of generative syntax, linking it to Chomsky’s labeling algorithm. She argued that concord facilitates the proper labeling of DP structures, preventing derivational crashes. For example, in Eq. (26).

26. *wa-toto wa John*

2-children 2-John

“John’s children.”

In (26), possessor *wa John* carries concord features that align with the head noun *wa-toto*, ensuring that the DP is correctly labeled.

In contrast, Norris (2014) developed two major contributions by introducing the idea that concord should be understood as a syntactic relation internal to the DP, distinct from subject-verb agreement. He argued that concord arises through feature percolation, whereby the interpretable features of the noun (gender, number, and case) spread through the DP and are copied by modifiers such as adjectives, demonstratives, and numerals. For example, (27) from the Estonian.

27. *need suured majad*

these big houses

these big houses.

In (27), both the demonstrative *need* and the adjective *suured* reflect the plural nominative features of the noun *majad* within the DP. Norris (2017) offered a cross-linguistic perspective, demonstrating that concord operates differently across languages, but consistently involves structural feature sharing rather than movement (Matushansky, 2019). His work emphasizes that concord is a distinct syntactic phenomenon, not eliminable to morphology, and that it plays a role in the internal architecture of agreement systems. Later, Bayirh (2017, 2022) articulated a universal theory of concord, the feature-sharing relationship between nouns and their modifying adjectives. According to him, many languages show full agreement across number, gender, case, and person. On the other hand, a few marks only partial concord. Importantly, Bayirh revealed that such partial patterns are not random but follow a systematic alignment:

28: The Concord Hierarchy Generalization (Bayirh, 2017)

There is a hierarchy among gender, number and case features

(case >> number >> gender) such that

(i) The presence of a concord for some features in a language (L) implies that:

(ii) The presence of concord for every feature in (L) which is lower in the hierarchy.

According to (28), two instances are observed: (a) the concord is obligatory whenever phasal domains are inactive and (b) languages that lack concord do so because the noun phrase functions as a phase, blocking feature transmission. Such dictums yield testable predictions; for example, idiosyncratic gender languages must show gender concords, both of which are empirically supported. Moreover, the phase-based account explains why non-concord languages exhibit properties, such as restricted adjective movement, number neutrality, and shared inflection across coordinated nouns. Thus, Bayirh reframes concord as a universal, structurally determined phenomenon, rather than a language-specific accident, offering a predictive framework for cross-linguistic variation. Pesetsky (2013) posits a systematic solution for concord, which is Feature Assignment (FA), a rule that operates in tandem with the syntactic operation merge. Accordingly, when a constituent merges with another phrase, the grammatical features of the head are immediately *copied* onto the merged phrase and subsequently realized as morphology on all lexical items dominated by that phrase. This copying mechanism ensures that features, such as gender, number, and case, are perfectly distributed within the structure. Importantly, Pesetsky distinguishes between features belonging to heads and phrases, introducing the principle of Feature Projection, whereby features on a head are copied onto any projection of that head. This provides a formal explanation for how the concord spreads beyond the immediate head to its extended projections.

Building on this, Koopman (2003) argues for a hierarchy of functional heads within the extended projection of nouns. She proposed that CaseP occupies the highest position, followed by NumP, and then GenP, with NP at the base. This hierarchy reflects a configurational difference between the syntactic heads that host these features and accounts for the order in which the concord features are realized. For example, case features dominate number features, which in turn dominate gender features. Koopman's structural hierarchy aligns with Pesetsky's mechanism of successive Feature Assignment, whereby features are copied from higher functional projections down to lexical items within the NP.

Together, these accounts provide a theoretical foundation for understanding concord as a systematic process: Pesetsky's Feature Assignment and Projection explain the mechanics of feature distribution, whereas Koopman's hierarchy of functional heads explains the structural configuration in which these features are hosted (Ke, 2023; Laenzlinger, 2005). This convergence supports the broader claim that concord is not arbitrary but is determined by the universal principles of syntax and morphology.

In Asian languages, Urdu/Hindi represent gender and number concord between nouns and adjectives; they lack overt case concord, based instead on postpositions. Previous research on concord (e.g., Bayirh 2017; Carstens, 2000, 2001, 2011, Pesetsky, 2013; Svenonius, 1993) has primarily focused on the structural nature of concord in Indo-European languages with rich case morphology (Russian, Greek, German) or languages with

no concord at all (English). To the best of our knowledge, few studies have been conducted on how partial concord systems---Urdu/Hindi---match with the Concord Hierarchy Generalization (case >> number >> gender), especially in relation to the role of phasal domains and functional projections.

Research Methodology

The study adopts a qualitative descriptive research design, selected for its reliability, to provide context-rich accounts of linguistic phenomena without extending rigid theoretical constraints, in terms of Sandelowski's (2000) observation that qualitative description is most appropriate when straightforward documentation is desired. The theoretical approach enables systematic investigation of hierarchies in Urdu nominalization with respect to modifier-head mismatches by foregrounding empirical regularities that can adjudicate between Agree and non-Agree accounts (Van Koppen, 2012). Selecting a qualitative approach is well-suited as the study is descriptive in nature and grounded in the theory of concord hierarchy generalization. For a theoretical study, data is essential, and its source must be credible, and valid data ensure reliable results and theory-based outcomes.

Data Collection

Data were gathered from 60 Urdu native speakers (n=30 female, n=30 male; ages 20-50, mean \approx 32) from urban and semi-urban Punjab backgrounds who participated in elicitation tasks, all reporting Urdu as their primary language, fluent literacy, and at least secondary education, with exclusion criteria for significant non-Urdu exposure or language disorders (Jamil et al., 2025; Warner, 1988). Participants completed acceptability judgment tasks after obtaining informed consent and received modest compensation. The collected data were scrutinized by three trained linguists who performed calibration and coded head number/gender, modifier type, morphological exponence, and syntactic context for validation. Data collection combined audio recording sampling facilitated by one of the native Urdu speakers in the community.

Ethical Consideration

The study adhered to all ethical codes and principles while conducting this study. Participants were surveyed to obtain their written willingness to participate in the study. The participants were properly guided about the scope and research purpose of the study and the use of their data. Participants were discriminated against based on gender and sociocultural background, including this study.

Data Validation

The collected data were cross verified by independent linguists to specify the features of each category in a nominal phrase (Fath Addin, 2025). The data were assigned values based on plus (+) and minus (-) with distinct features, such as number, gender, person, and case. The features were specified as follows: number = [-SG] [+SG], gender = [+MAS] [-MAS], person = [+1P] [+2P] [+3], [-1] [-2] [-3], and case = [+NOM] [+ACC] [+ERG] [+DAT]. These features have been utilized for the representation of data in a formal manner according to the system proposed by Pesetsky (2013).

Theoretical Framework

This study adopts the concord theoretical framework presented by Pesetsky (2013) under the universal rules of Feature Assignment (FA) associated with merge operations.

Feature Assignment

- i. Copying: when α merges with P, constructing $[\alpha \beta]$, the grammatical features of α are immediately copied on P
- ii. Realization: ... and are realized as morphology of all lexical head items dominated by β .

Following the above feature assignment (FA), is a might be a phrase and adjunct, and the gender feature is also associated with the head rather than the phrase. We follow feature projection (FP) for passing on grammatical features from dominator to dominee. Feature Projection: When Φ is the projection of ψ , k is the

set of features. This is represented in figure-1.s follows:

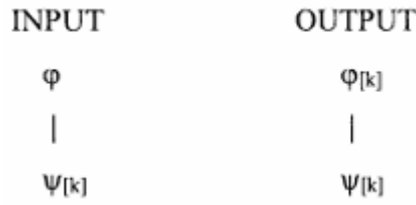


Figure-1

These features copied from the phrasal category to every lexical head-dominated category, which is mediated by the successive application of feature assignment (FA). In Feature Assignment (FA), when Φ dominates ψ , and i and k are a set of features (figure-2).

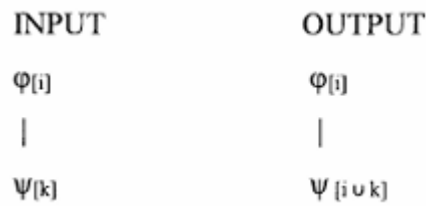
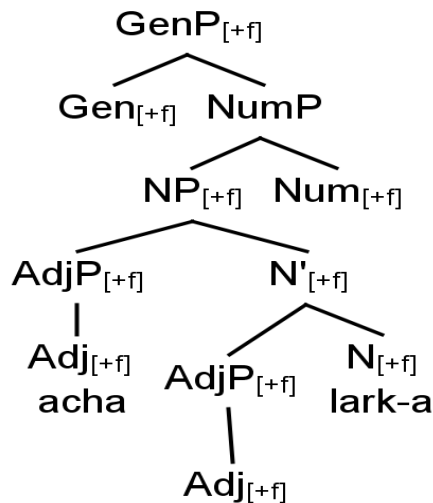


Figure-2

Data Analysis

Asymmetries in Urdu Adjectives and Noun Concord

29. achā	laṛkā	
good. MAS.SG	boy. MAS.SG	
“big boy”		[-Masculine]



30. baṛī	laṛkī	
big. FEM.SG	girl.FEM.SG	
“big girl”		[-Feminine]
31. baṛe	laṛke	

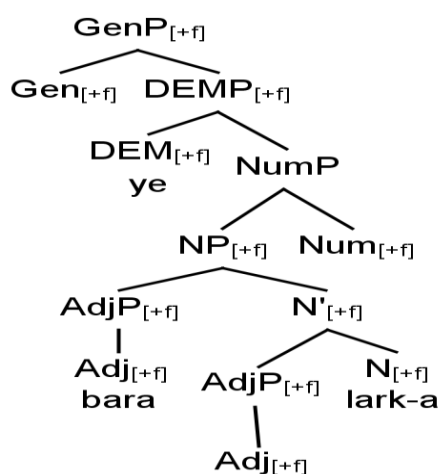
big. MAS. PL. CASE boys. MAS. PL. CASE
 “big boys” [+Masculine]

32. baṛī laṛkiyā
 Big. FEM. PL. CASE girls. FEM. PL. CASE
 “big girls” [+Feminine]

In the above stated data (29-32), it is observed that the head noun, larka, larki, larke, laṛkiyā merge with adjective and subsequently adjective following feature assignment copies number and gender features from nouns and then feature projection principle licenses the feature realization to adjective morphology (Corbett, 2006).

Asymmetries in Urdu Demonstratives and Noun Concord

33. yeh baṛā laṛkā
 this. DEM big. MAS. SG. CASE boy. MAS. SG. CASE
 “this big boy” [+Masculine]



34. yeh baṛī laṛkī
 this. DEM big. FEM. SG. CASE girl. FEM. SG. CASE
 “this big girl” [+Feminine]

In the above demonstrate data (33-34), demonstrative is a default category in Urdu, and yeh adapts to number and gender, showing FA from the noun head. According to the feature projection, different features encoded on the noun head are transferred to their extended projections (e.g., adjective phrases and demonstratives). Because gender and number are lower in the functional hierarchy, they are perfectly projected. Consider examples (35-38), demonstratives in Urdu are diverse---ye (this/these) and wo(that/those). However, they exhibit different features in Urdu. Demonstratives in Urdu do not overtly carry number, gender, person, and case features, but copy these features from the corresponding nouns. In (35-36), ye (this/these) matches with either a singular noun, kitaab (book), or a plural noun, kitaab-ein (books). Morphological affixation is not represented in Urdu ye demonstratives. Despite ye demonstrative, In Urdu, wo(that/those) in examples (37-38) represent the same nature.

35. yeh kitaab
 this-SG book-F.SG
 “this book”

36. yeh kitaab-ein
 these-PL books-F.PL
 “these books”

In examples (37-38), wo (that) copies features from corresponding nouns, while the merge operation follows feature assignment (FA). It is observed that demonstratives in nominal phrases in Urdu depict no gender, number, or case features, but they copy these features while the operation merges. Now, consider examples (39-40) for numerals such as aik (one) and doo (two).

37. woh larka
 that-SG boy-M.SG
 “that boy”

38. woh larke
 those-PL boys-M.PL
 “those boys”

Asymmetries in Urdu Numerals and Noun Concord

Consider examples (39-40) of numerals aik (one) and doo (two), in which numerals do not match the corresponding category as asterisk (*) ungrammatical sentences. Aik and doo belong to the same category. The feature assignment (FA), locality condition is followed while copying features according to the FA. Once features are copied, it only copies on the corresponding domain but is not accessible out of the domain. Examples (39-40) are ungrammatical because they do not copy the features of numerals in Urdu. Consequently, both the examples are ungrammatical. Consider examples (41-42). Features are copying on corresponding categories while merging numerals in Urdu, such as aik (one) and doo (two).

39. *Aik woh larka
 One that-SG boy-M.SG
 “one that boy”

40. *Doo woh larke
 Two those-PL boys-M.PL
 “those boys”

In examples (41-42), larka (boy) merges with numeral (aik) in (41), and larke (boys) merges with doo (two) in the nominal structure of Urdu. Features are copied successfully on the functional projection, and a concord is established. Consequently, these examples are grammatical.

41. Aik larka
 One-SG boy-M.SG
 “one boy”

40. Doo larke
 Two-PL boys-M.PL
 “Two boys”

Findings and Discussion

Focusing on Urdu concord asymmetries particularly within adjectives with nouns, and demonstratives along with adjective and nouns, this study demonstrates that Urdu concord in nominalization is best observed as a partial concord system according to Bayirh's (2017) Concord Hierarchy Generalization. This hierarchy (case >> number >> gender) states that the presence of higher-order concord features entails the presence of lower-order features. In this study, Urdu supports this prediction by revealing robust gender and number concord in both adjective + noun and demonstrative + adjective + noun constructions, while systematically lacking a

case concord.

Dealing with adjectives along with nouns in nominal structures, adjectives consistently demonstrate a perfect match with gender and the number of head nouns. Masculine singular nouns trigger the *-ā* ending (29) (achā laṛkā “big boy”), feminine singular nouns trigger *-ī* (baṛī laṛkī “big girl”) (30), masculine plural nouns trigger *-e* (baṛe laṛke “big boys”) (31), and feminine plural nouns retain *-ī* with plural noun morphology (baṛī laṛkiyā “big girls”) (32). In this way, such concord asymmetries also follow Feature Assignment (Pesetsky, 2013) copies gender and number features from the noun to the adjective, and Feature Projection licenses their morphological realization.

Analyzing complex nominal structures comprising demonstratives, adjectives, and nouns also represents interesting facts in Urdu. Such structures also reveal that (yeh) also aligns with the gender and number of nouns, demonstrating the successive utilization of feature assignment (FA). For example (33), yeh baṛā laṛkā (“this big boy”) posits masculine singular concord across demonstrative and adjective, while yeh baṛe laṛke (“these big boys”) reflects masculine plural concord. Feminine nouns (34) trigger feminine agreement (yeh baṛī laṛkī, yeh baṛī laṛkiyā). However, these nominal complex constructions provide recursive concord asymmetrical chains (41).

41. noun >> adjective >> demonstrative

In this asymmetrical concord, it must follow the feature projection (FP) licensing feature realization (FR) for all the corresponding modifiers. In contrast, in our findings, no case concord was observed in either structure. In this way, it is assumed that case features are blocked in the NP phase cycle and expressed externally through postpositions, albeit to be morphologically realized on adjectives or demonstratives. This suppression of case concords, alongside the preservation of gender and number concords, shows Urdu precisely within Bayirh’s (2017) hierarchy. The non-occurrence of case concord does not preclude the representation of lower features; however, the reverse is impossible.

Comparatively, languages such as Russian and Greek exhibit full concord systems, in which case, number, and gender are all morphologically realized on modifiers (Carstens, 2000, 2011; Pesetsky, 2013). Urdu’s reliance on postpositions for case marking highlights its typological distinctiveness as a partial concord language while still conforming to the universal predictions of the Concord Hierarchy.

Conclusions

This study articulates the nominalization functions of Urdu concord within the criterion and filter of Bayirh’s (2017) Concord Hierarchy. According to chain formation---case >> number >> gender, Urdu consistently demonstrates gender and number concord in both adjective + noun and demonstrative + adjective + noun structures but lacks case concord. The non-occurrence of case concord is structurally predicted by the NP phase boundary, which suppresses higher-order case features while allowing lower-order gender and number features to be projected and realized. Employing Pesetsky’s (2013) Feature Assignment (FA) and Feature Projection (FP) frameworks based on Koopman’s (2003) functional hierarchy, this study provides a unified account of Urdu’s concord that aligns nominal and clausal domains equally. This implies that concord is not obligatory but hierarchically constrained, and that partial concord systems such as Urdu are predicted outcomes of universal principles. Consequently, this study highlights the significance of integrating syntactic hierarchy, feature assignment, and morphological realization in explaining concord phenomena, offering a new conceptualization of the interaction between syntax and morphology in head-final languages.

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