



Long-Distance Agreement in Urdu-English Code-Switching: A Proxy-Agreement Analysis

Maryam Jamil¹, Asad Ali², Riffat Naz³

¹Department of English, The University of Chenab, Gujrat, Punjab, Pakistan
Email: maryam.jamil5555@gmail.com

²Department of English, The University of Chenab, Gujrat, Punjab, Pakistan
Email: masad7721@gmail.com

³Department of English, University of Mianwali, Punjab, Pakistan
Email: riffatnaz2466@gmail.com

ARTICLE INFO

Keywords:

Long-distance agreement,
Urdu-English code-switching, Proxy Agreement,
Naturalistic inquiry

Corresponding Author: Asad Ali

Department of English,
The University of Chenab,
Gujrat, Punjab, Pakistan
Email:
masad7721@gmail.com

ABSTRACT

This study investigates the phenomenon of long-distance agreement (LDA) in Urdu-English code-switching (CS) employing a Proxy Agreement model (Polinsky and Potsdam, 2001). Drawing on qualitative research design, the study collected data from balanced bilingual speakers using a field-work instrument, *audio-recording*. The analysis shows that traditional agreement (probe-goal) is insufficiently redundant to account for DP agreement in Urdu-English code-switching (CS) in embedded clauses. Generative models, however, predict uniformity not only in monolingual but also in bilingual competence, the Urdu-English code-switching (CS) data reveals permeability across syntactic domains, reflecting the decisive role of argument structure, specifically topicality, in constructing agreement patterns. The study concludes that discourse-sensitive Polinsky & Potsdam's (2001) Proxy Agreement framework provides a more understandable and comprehensive account of bilingual syntax, particularly in embedded clauses. The study implicates bilingual education by exhibiting the permeability of syntactic domains in Urdu-English code-switching, facilitates linguistics theory toward integrating discourse-sensitive models, and supports research in multilingual communication by demonstrating how topicality influences agreement patterns across languages.

INTRODUCTION

The phases, typically represented by CP and vP are essential in regulating grammatical properties in both monolingual as well as Phase Theory as introduced by Chomsky (1995; 2008) conceptualizes syntactic derivation as a stepwise process involving discrete grammatical units—phases—that contribute to the hierarchical and well-formed structure of a sentence (Ali et al., 2020; 2021a; 2021b; 2025). bilingual syntactic constructions. Building on Chomsky's (2014) minimalist program, Lopez (2017, pp. 1-19) applied phase theory (2008) to language mixing corpora, stipulating two hypotheses: the phase head hypothesis and blocking transfer hypothesis. The PPH articulates that phase heads (C and v) determine the grammatical properties of their complements and must originate from the same language in the derivation (Ali et al., 2023a; 2023b; Ashraf et al., 2021; 2025). PTH furthermore asserts that all syntactic material within a phase must be transferred simultaneously to phonological form (PF) interface, thereby restricting cross-linguistic incorporation at phase level (González-Vilbazo & López, 2011; 2012). These constraints aim to preserve syntactic coherence and prevent the mixing of phonological and morphological material from different languages (Gosseline, 2022; Jake & Myers-Scotton, 1997). However, empirical evidence from Urdu-English bilingual corpora challenges the universality of these hypotheses. Consider the following naturally occurring example (1).

1. Mother said that Aqsa vomit kar-na chaha-tii hai.

Mother said that Aqsa vomit LVB-INF want-INF be. AUX. PRES

“Mother said that Aqsa want to vomit.”

The example in (1) illustrates a bilingual construction where English and Urdu categories are syntactically integrated within clausal domain, challenging the phase-based constraints proposed by Lopez et al., (2017). The embedded clause contains an English lexical verb combined with an Urdu light verb *kar-na*, followed by the Urdu inflected verb *chaha-ti* and auxiliary *hai*, forming a coherent and grammatical utterance for bilingual speakers. In (1), it is observed that phase head from different language can coexist within a single derivation without violating grammaticality, thereby undermining the universality of PPH and BTH. Example (1) also supports the view that bilingual competence permits flexible syntactic integration, and that phase heads function more as featural constraints rather than rigid structural boundaries in code-switching (CS).

This discrepancy offers that phase head may function more as featural constraints, akin to earlier models such as the Equivalence Constraint (EC), Free Morpheme Constraint (FMC), and PF Disjunction Theorem. Rather than facilitating rigid structural boundaries, phase heads in code-switching contexts appear to offer grammatical integration across languages. Resultantly, this study asserts that phase theory, as currently formulated, does not appropriately account for the syntactic behavior of long-distance agreement (LDA) noted in Urdu-English code-switching. It offers re-evaluation of the phase-based models on both theoretical and empirical footings, utilizing bilingual data to challenge and refine existing linguistics framework.

Research Questions

RQ1: How does Long-Distance Agreement (LDA) operationalize in Urdu-English code-switching across phase boundaries?

RQ2: Do both phase heads (C_o and v_o) block or allow Long-Distance Agreement (LDA) in Urdu-English code-switching?

LITERATURE REVIEW

Languages contact and its consequences have long attraction scholarly attention, with extensive research dedicated to various sub-domains such as borrowing, code-mixing and code-

switching (CS) (Pfaff, 1979; Poplack, 1980). Among all these phenomena, code-switching has received particular focus due to its relevance to the grammatical, social and educational dimensions of bilingual discourse (Bullock & Toribio, 2009). Scholars have defined code-switching (CS) as the incorporation of lexical and syntactic elements from two distinct languages within the clausal domains (Chan, 2008; Malik, 2017 and Ali et al., 2020; 2021b; 2025).

Code switching has been studied from multiple perspectives. Sociolinguistics studies have primarily focused on social motivations and contextual factors influencing code-switching (CS) behavior. In contrast, other research has concentrated on structural aspects, particularly inter sentential code-switching, which occurs at clausal boundaries. A more formal grammatical approach however addresses intra-sentential code-switching, focusing on syntactic and morphological operations within a single code-switched sentence. This perspective aims to uncover underlying mechanisms that govern bilingual sentence construction and the interaction of linguistic systems at the structural level (Ilyas et al., 2023; Jabbar et al., 2021).

Poplack (1980) was the pioneer in grammatical study of the code switching, proposing two constraints, free morpheme constraint (FMC) and equivalence constraint (EC). These constraints aim to account for the grammatical boundaries within which code switching occurs. Later, these ideas evolved into the PF Disjunction Theorem, which theoretically aligned with Poplack's (1980) original constraints, did not categorically block switching and has been tested across multiple language corpora. Subsequent research has continued to refine theoretical understanding of code-switching (CS). Mahootian (1990), Chan (2008), MacSwan (2005), Ali et al. (2020; 2021b; 2025), and Alnuzaili et al. (2025) have argued that no external syntactic toolkit is necessitated to capture mixed grammar and bilingual competence. Ali et al. (2020; 2021a; 2021b) further that linguistic evolution—whether in monolingual or bilingual contexts—is “involuntary”, aligning with Poplack's (1980) view of systematicity in bilingual speech (Alnuzaili et al., 2024).

Theoretical approaches to code-switching can be broadly categorized into constraint-based and constraint-free models. Constraint-based approaches are further divided into non-generativist and generativist frameworks. Non-generativist models, such as those articulated by Poplack (1980), Myers-Scotton (2017), emphasize structural constraints to capture grammatically well-formedness in bilingual utterances. Conversely, generativist approaches—while proposing to reject structural constraints—often implicitly rely on generative mechanisms, thus blurring the line between the two paradigms (Ali et al., 2025; Chan, 2008; Gonzalez, 2011; MacSwan, 2018).

Related Studies

Recent studies (e.g; Rahimi & Dabaghi, 2013; Sankoff, 1998; Sankoff & Poplack, 1981; Ali et al., 2020; 2021b; 2025; Alnuzaili et al., 2025; Alghamdi et al., 2025; Shim, 2016; Si, 2011; Treffers-Daller, 2025; Van Gelderen & MacSwan, 2008) on code-switching exhibited that generative models can perfectly account for long-distance agreement (LDA). Lopez et al., (2017) and Grimstad et al., (2018) employed generativist framework based on Chomsky's (1995) minimalist program. These studies also argue that there is no fundamental theoretical distinction between monolingual and bilingual linguistics competence. Within this framework, Lopez et al., (2017) articulated two key hypotheses under phase theory: the Phase Head Hypothesis (PHH), which asserts that phase heads determine the grammatical properties of their complements, and the Blocking Transfer Hypothesis (BLH), which argues that all heads within a phase are transferred simultaneously to the phonological form (PF) interface (Myers-Scotton, 1993; 2002; 2005; Myers-Scotton & Jake, 2000; 2014; 2017). However, empirical data (1) from Urdu-

English code-switching puts a challenging argument against the applicability of these hypotheses. The structural behavior noted in Urdu-English bilingual data gives a clue that the mechanism proposed by Lopez et al., (2017) are insufficient to deal with syntactic flexibility and permeability reflected in mixed clauses of long-distance agreement. Particularly, phase heads in Urdu-English constructions do not consistently block and linearize the syntactic domains as proposed by PHH and BTH.

To the best of our knowledge, Urdu, a morphologically complex and structurally free word-order language. It deals with the phase head quite differently. There is a limited studies focused on Urdu-English code-switching (CS) with respect to long-distance agreement (LDA). LDA is basically a phenomenon in which an NP/DP inflects with a functional category which is not in local domain. In this way, theoretically, it violates the locality constraints and c-command restrictions. This is the research gap which the study endeavors to address both theoretically and empirically limiting to the only one pair of language-Urdu-English code-switching (CS).

METHOD AND MATERIALS

Research Design

This study employs a *qualitative descriptive* research design grounded in the principles of naturalistic inquiry (Chomsky, 1995; 2005; 2014), which focuses on the investigation of long-distance agreement (LDA) in Urdu-English code-switching (Sacco, 2023; Olbertz-Siitonen, 2021). Data provides as a primary source of empirical evidence and it was collected through one of the field techniques, *audio-recording* from both formal and informal settings within the university campus. The approach ensures that linguistic practices and preferences of participants are documented in naturally occurring contexts, thereby enhancing the ecological validity of the study.

Participants

The participants were selected for this study on a scale balanced bilingual which ensure that each participant must be proficient in both the participating languages—Urdu and English. Our participants were from undergraduate-level students who enrolled in the University of Chenab, Gujrat, Pakistan, exhibit a competence fostered by their bilingual family backgrounds and prior education in prestigious English-medium institutions, including Beaconhouse School System. The sample size for this study was only 80 bilingual speakers, with an age range of 24-29 years, and include both male and female participants. The reason to select balanced bilinguals as participants is methodologically significant, as bilingual individuals reflect unique insights into language use, identity, and cognitive flexibility (Rabiah-Mohammed et al., 2024). Their linguistic behavior allows for a nuanced examination of bilingual practices across diversified social contexts. The inclusion of both genders and relatively narrow age also ensures representativeness while locating homogeneity in education and linguistic background, which fosters the reliability of results and major findings.

By employing naturalistic inquiry, this study matches with recent research methodological reflections in qualitative research that exhibit the importance of authentic data gathering, bilingual contexts and participant-based approaches (Sacco, 2023; Rabiah-Mohammed et al., 2024). In this way, this research design facilitates a deeper understanding of bilingual lived experiences and communicative practices within academic and social domains.

Agreement model (Polinsky& Potsdam, 2001)

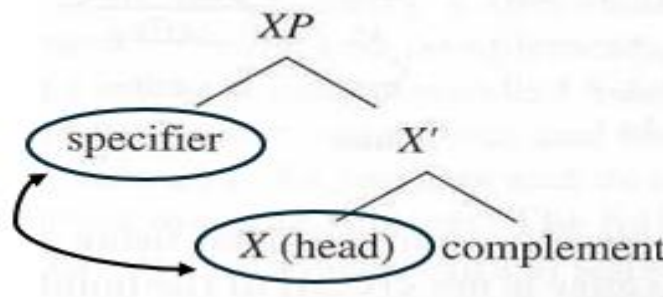
Agreement was examined in different languages including Tsez, a Nakh-Daghestanian language. In this language, a verb in matrix clause can show agreement with a noun phrase located inside an embedded clause. Consider the example (2).

2. Mother knows boy ate bread. [V-agrees with inside NP]

In this way, head-specifier agreement relationship is violated in traditional agreement theory (Chomsky, 1995). This however challenges the traditional syntactic theories of agreement (e. g: Chomsky, 1995; 2005; 2008) which assumes agreement strictly local. (specifier-head or clause-mate configurations) see (1).

(a). Spec-Head Agreement Hypothesis (SHAH):

Agreement reflects a specifier-head configuration between the probe and the trigger at some level of representation. (Polinsky & Potsdam, 2001, p. 608)



Polinsky & Potsdam (2001) revised the agreement model proposing that only topics (related NPs) exit inside the embedded clause can start agreement. This means that agreement is redundant syntactically but also information structural. The embedded topics related to NPs move covertly to a topic position within its clause (Afzal & Haider, 2015). A proxy operator (empty a silent category) links this topic position to matrix verb position. The matrix verb agrees with the proxy, not directly with the NP. This agreement is local with proxy and technically it is called a long-distance agreement (LDA) to avoid syntactic constraints. Polinsky & Potsdam (2001) proposed a condition (b).

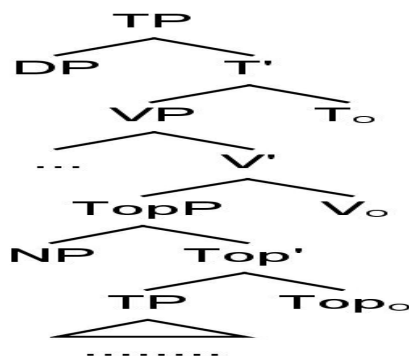
(b). Topic Condition of Long-Distance Agreement:

Agreement LDA occurs when the *referent* of the embedded *absolute NP* is the (primary) topic of the embedded clause. (Polinsky & Potsdam, 2001, p. 613)

(c). Agree (Chomsky 2000, pp. 37–38)

P may agree with T if

- i) there is feature identity between P and T
- ii) P c-commands T
- iii) Locality is respected

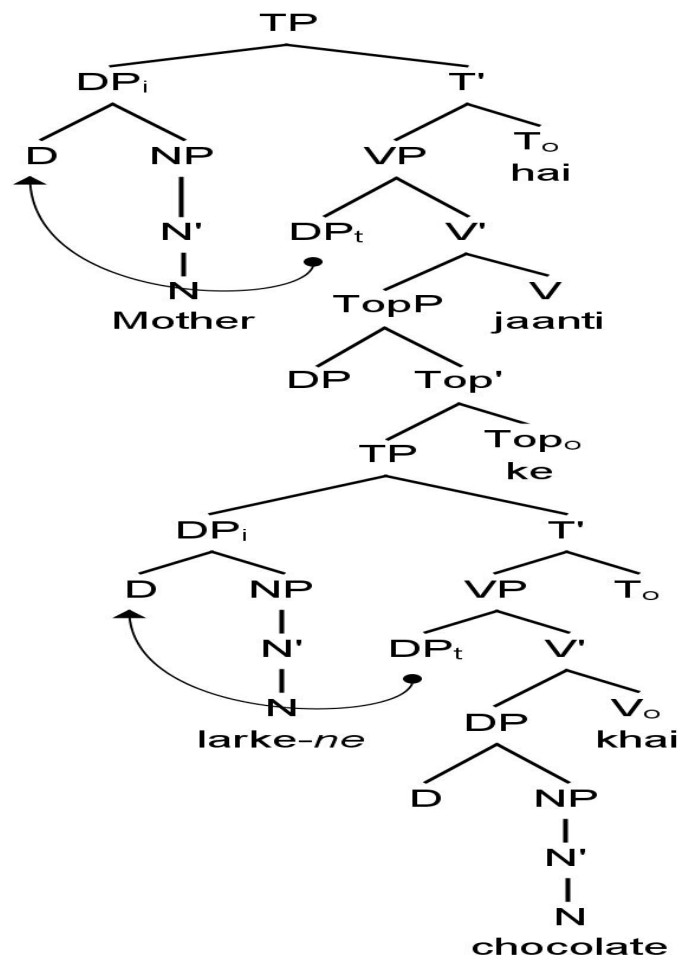


The study adapts Proxy-Agreement model (Polinsky & Potsdam, 2001) as represented above. TopP is the incorporated to avoid the universality of constraint-free model and maintaining locality as given in (c) above. This representation is based on the Mahajan (1990), AgrS /AgrO model.

DATA ANALYSIS

In this section, we present data analysis, consider example (3), we noticed that mixed sentence. In this example (3), The DP, *mother* is from English, and the DP in subordinate clause is from English.

3. Mother jaanti hai ke larkay-*ne* chocolate khai.
 Mother know be.AUX that boy-ERG chocolate eat.PST.
 “The mother knows that the boy ate chocolate.”



In Urd-English code-switching, this typical sentence reflects local agreement, where a matrix verb, *jaanti hai*, agrees with the matrix subject DP, *mother* whose gender feature is

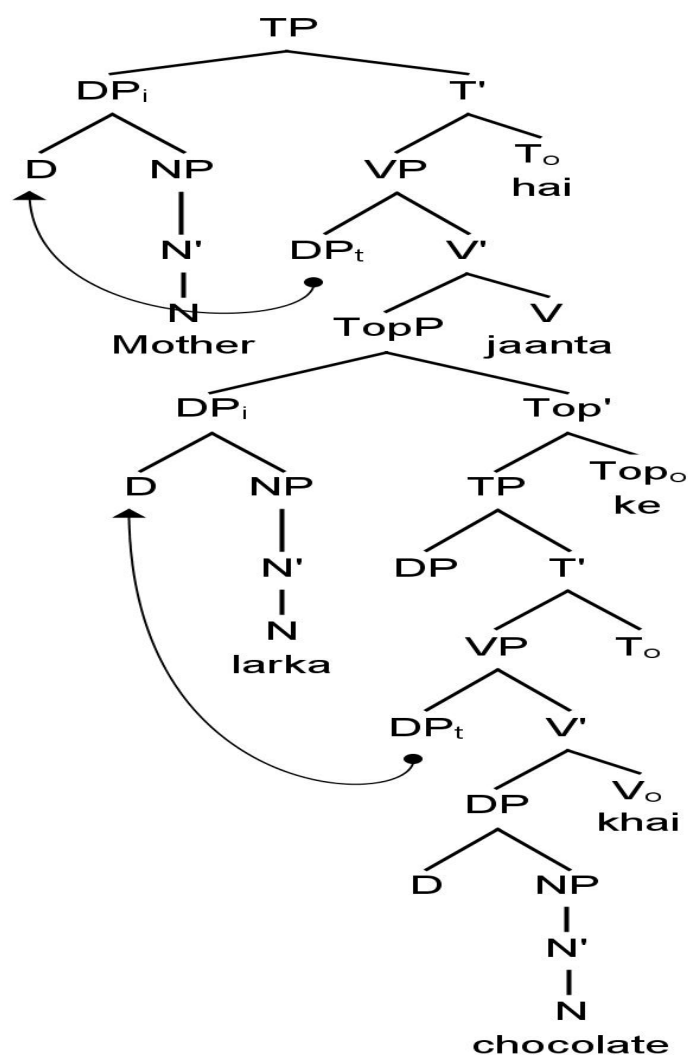
feminine, and the verb in embedded clause is *khai*, eat agrees with the embedded clause object DP, *chocolate* (feminine) (Saram et al., 2023). However, consider topicalized subject DP in example (4). If the embedded subject, *larka*, a boy is topicalized (4), the matrix verb may shift to masculine agreement showing the topicalized DP rather than the local subject (Dar et al., 2024). According to Polinsky & Potsdam's (2001) Proxy Agreement model, this occurs because the embedded DP, overtly moves to a topic position within its clause, and a proxy operator mediates agreement between the matrix verb and the topicalized DP.

4. *Larka*, mother jaanta hai ke chocolate khai.

Boy mother know be.AUX that chocolate eat.PST

“The mother knows that the boy are chocolate.”

In this way, what appears to be long-distance agreement (LDA) is actually local agreement within the proxy topicalized head, reflecting that discourse prominence (topicality) can override strict syntactic locality in Urdu just as in Tsez.



DISCUSSION

This study investigated long-distance agreement (LDA) in Urdu-English code-switching (CS) naturally observing in campus setting. Recent generative proposals of long-distance agreement (LDA) in bilingual research, such as Lopez et al. (2017), Grimstad et al. (2018), Jabbar et al. (2021), Ali et al. (2021), Alnuzaile et al. (2025), and Alghamdi et al. (2025) argue that phase theory within Chomsky's (1995; 2014) minimalist program can superbly account for agreement phenomenon across monolingual and bilingual grammars. Lopez et al. (2017) particularly proposed the phase head hypothesis which predicts that phase heads determine the grammatical properties of their complements, and the blocking transfer hypothesis, which specifies that all heads within a phase are transferred simultaneously to the phonological form (PF) interface. These hypotheses propose that bilingual competence operates under the same structural constraints as monolingual competence, thereby eliminating any fundamental theoretical distinction between two (Niaz & Ali, 2023). However, the empirical evidence from Urdu-English code-switching gathered in this study challenges the universality of these claims. The bilingual data reveals that phase heads in mixed clauses do not consistently block or linearize syntactic domains as predicated by PHH and BTH. Instead, Urdu-English bilinguals reflect syntactic permeability and flexibility, permitting agreement relations to extend beyond the boundaries of a single phase (Bentahila & Davies, 1992; MacSwan, 2000; Mahootian & Beatrice Santorini, 1996). For instance, matrix verbs in Urdu seldom agree with embedded English subjects or objects when these constituents are topicalized, a pattern that diverges from the strict locality predicated by phase theory (Chomsky, 2008). This argues that information structure (topicality and focus) plays a more decisive role in agreement than phase boundaries, aligning more locally within discourse-sensitive models such as Polinsky & Potsdam's (2001) Proxy Agreement framework.

In this way, the overall findings of this study indicate that while generative models can account for LDA in controlled bilingual situations, they all short in explaining the structural fluidity of Urdu-English code-switching (CS), where agreement is not rigidly constrained by phase heads (Belazi et al., 1994). Instead, the data empirically supports the view that bilingual grammar operates within greater permeability across syntactic domains, and that discourse-driven mechanisms override phase-based blocking effects. These findings contribute to the growing body of research that questions the sufficiency of minimalist phase theory in the syntax of bilingual grammar and reflects the requirements for the models that integrate syntax with discourse and sociolinguistic factors.

CONCLUSION

This study investigated the phenomenon of long-distance agreement (LDA) in Urdu-English code-switching (CS), extending the findings against the generative accounts such as Lopez et al. (2017). While Urdu is a language with complex word-order language, it scrambled the syntactic categories inter-clauses and intra-clauses (Den Dikken, 2011). The Urdu-English bilingual data show that phase boundaries do not consistently block or linearize syntactic domain, but the different features ensure agreement relations (Baker, 2009). These results exhibit permeability and flexibility of bilingual syntax, where discourse-driven mechanisms such as topicality override rigid structural constraints. Resultantly, the study predicts DP outside the embedded clause and inside the embedded clause can agree with the T₀. Subsequently, this study

theoretically contributes to a more nuanced understanding of bilingual competence, focusing on its dynamics and context-sensitive nature.

ACKNOWLEDGEMENT

The authors would like to express their sincere gratitude to the students and colleagues at the University of Chenab for their valuable guidance and constructive feedback throughout this research. Special thanks are extended to the bilingual participants (Sehar Fatima BS English Students Final semester) whose contributions made this study possible.

CNFLICT OF INTEREST STATEMENT

The authors declare that there are no conflicts of interest, financial or otherwise, that could have influenced the outcomes of this study.

REFERENCE

- Ali, A., Dar, N. K., & Ashraf, J. (2025). On Agreement of Urdu Relative Clauses. *International Journal of Advanced Social Studies*, 5(2), 76-87. <https://doi.org/10.70843/ijass.2025.05209>
- Ali, A., Saddique, A., Ashraf, J., & Munir, Z. (2025). Inflectional Morpheme and Frequency Patterns in Urdu-English Code switching: A Corpus-Based Study. *Journal of Arts and Linguistics Studies*, 3(3), 5013–5032. <https://doi.org/10.71281/jals.v3i3.452>
- Ali, A., Jabbar, Q., & Kiani, H. (2021a). Clausal-internal scrambling in the Urdu language: A derivation by phases. *REiLA: Journal of Research and Innovation in Language*, 3(1), 52-60. <https://doi.org/10.31849/reila.v3i1.5968>
- 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.
- Ali, A., Jabbar, Q., Malik, N. A., Kiani, H. B., Noreen, Z., & Toan, L. N. (2021b). Clausal-internal switching in Urdu-English: An evaluation of the Matrix Language Frame Model. *REiLA: Journal of Research and Innovation in Language*, 3(3), 159–169. <https://doi.org/10.31849/reila.v3i3.6774>
- Ali, A., Malik, N. A., & Zain. (2023a). Split tense projection in Urdu: An illusion. *Pakistan Journal of Language Studies*, 7(1), 16–31. Retrieved from //pjls.gcuf.edu.pk/index.php/pjls/article/view/222
- Ali, A., Younis, A., Jabbar, Q., & Niaz, S. (2023b). Morphosyntactic study of Urdu ESL learners: A derivation by interface. *Journal of Studies in Language, Culture and Society*, 6(2), 36–43. <https://asjp.cerist.dz/en/article/239075>
- Alnuzailli, E. S., Alghamdi, S. S., Ali, A., Almadani, M. A., Alhaj, A., & Malik, N. A. (2025). Code-switching beyond phases. *Cogent Arts & Humanities*, 12(1). <https://doi.org/10.1080/23311983.2025.2564881>
- Alnuzailli, E. S., Waqar Amin, M., Saad Alghamdi, S., Ahmed Malik, N., A. Alhaj, A., & Ali, A. (2024). Emojis as graphic equivalents of prosodic features in natural speech: Evidence from computer-mediated discourse of WhatsApp and Facebook. *Cogent Arts & Humanities*, 11(1). <https://doi.org/10.1080/23311983.2024.2391646>
- Alghamdi, A. S. S., Malik, N. A., Alnuzailli, E. S., & Abdel, H. (2023). Incorporating verbs in code-switching: Insights from the matrix language frame model. *Journal of Ethnic and Cultural Studies*, 12(4), 234–265.
- Afzal, F., & Haider, A. (2025). On Multiple Agreement in Urdu Language: A Cyclic-Agree Account. *International Journal of Advanced Social Studies*, 5(2), 149-159. <https://doi.org/10.70843/ijass.2025.05215>

- Ashraf, J., Mehmood, N., Ali, A., & Jabbar, Q. (2021). Possessor in Urdu nominal phrases. *Educational Research (IJMCER)*, 3(6), 30–37. https://www.ijmcer.com/wp-content/uploads/2023/07/IJMCER_E03603037.pdf
- Ashraf, J., Munir, Z., & Ali, A. (2025). Nominal licensing in Urdu-Hindi applicative construction. *Journal of Arts and Linguistics Studies*, 3(1), 193–211.
- Baker, M. C. (2009). Is head movement still needed for noun incorporation?. *Lingua*, 119(2), 148–165. <https://doi.org/10.1016/j.lingua.2007.10.010>
- Belazi, H.M., Rubin, E.J., & Toribio, A. J. (1994). Code switching and X-Bar Theory: The functional head constraint. *Linguistic Inquiry*, 25(2), 221–237. <http://www.jstor.org/stable/4178859>
- Bentahila, A., & Davies, E. E. (1992). Code-switching and language dominance. In *Advances in Psychology* (Vol. 83, pp. 443–458). North-Holland. [https://doi.org/10.1016/S0166-4115\(08\)61510-1](https://doi.org/10.1016/S0166-4115(08)61510-1)
- Chan, B. H. S. (2008). Code-switching, word order and the lexical/functional category distinction. *Lingua*, 118(6), 777–809. <https://doi.org/10.1016/j.lingua.2007.05.004>
- Chomsky, N. (2005). Three factors in language design. *Linguistic inquiry*, 36(1), 1–22. <https://doi.org/10.1162/0024389052993655>
- Chomsky, N. (2008). On phases. In R. Freidin, C. P. Otero, & M. L. Zubizarreta (Eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud* (pp. 133–166). Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/9780262062787.003.0007>
- Chomsky, N. (1995). The minimalist program. Cambridge, MA: MIT Press
- Chomsky, N. (2014). The minimalist program. MIT Press
- Chomsky, N. (2000). Minimalist inquiries: The framework. In R. Martin, D. Michaels, & J. Uriagereka (Eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik* (pp. 89–155). Cambridge, MA: MIT Press.
- Gosselin, L. (2022). Bilinguals have a single computational system but two compartmentalized phonological grammars: Evidence from code-switching. *Glossa: a journal of general linguistics*, 6(1).
- López, L., Parafita Couto, M. C., & Patino, G. (2017). Long-distance agreement in code-switching: Evidence from Spanish-English bilinguals. *Glossa: A Journal of General Linguistics*, 2(1), 1–29. <https://doi.org/10.5334/gjgl.165>
- Grimstad, B., Lohndal, T., & Riksem, B. (2018). Language mixing and agreement in bilingual clauses. *The Linguistic Review*, 35(4), 427–467. <https://doi.org/10.1515/tlr-2018-0012>
- Dar, N. K., Khan, M.S., Naz, R., & Ali, A. (2024). Assessing semantic perception, morphological awareness, reading comprehension and delay time processing in autistic children. *Journal of Arts and Linguistics Studies*, 2(3), 1737–1760. <https://jals.miard.org/index.php/jals/article/view/182>
- Den Dikken, M. (2011). Phi-feature inflection and agreement: An introduction. *Natural Language & Linguistic Theory*, 29, 857–874. <https://doi.org/10.1007/s11049-011-9156-y>
- González-Vilbazo, K., & López, L. (2011). Some properties of light verbs in code-switching. *Lingua*, 121(5), 832–850. <https://doi.org/10.1016/j.lingua.2010.11.011>
- González-Vilbazo, K., & López, L. (2012). Little v and parametric variation. *Natural Language & Linguistic Theory*, 30, 33–77. <https://doi.org/10.1007/s11049-011-9141-5>

- Gosselin, L. (2022). Bilinguals have a single computational system but two compartmentalized phonological grammars: Evidence from code-switching. *Glossa: A Journal of General Linguistics*, 6(1), 147. <https://doi.org/10.16995/glossa.5800>
- Ilyas, Y., Noreen, H., & Ali, A. (2023). Syntactic layer of coordination and conjuncts agreement: Evidence from Pakistani English newspapers. *Journal of Education and Social Studies*, 4(3), 683–691. <https://doi.org/10.52223/jess.2023.4328>
- Jabbar, Q., Ali, A., Malik, N. A., Mahmood, N., & Wasif, M. (2021). Morphosyntactic sub-categorization of lexical verbs. *Webology*, 18(6), 4145-4165.
- Jake, J. L., & Myers-Scotton, C. (1997). Codeswitching and compromise strategies: Implications for lexical structure. *International Journal of Bilingualism*, 1(1), 25–39. <https://doi.org/10.1177/136700699700100103>
- López, L., Alexiadou, A., & Veenstra, T. (2017). Code-switching by phase. *Languages*, 2(3), 9. <https://doi.org/10.3390/languages2030009>
- MacSwan, J. (2000). The architecture of the bilingual language faculty: Evidence from intrasentential code switching. *Bilingualism: language and cognition*, 3(1), 37–54. <https://doi.org/10.1017/S1366728900000122>
- Mahootian, S., & Beatrice Santorini, B. (1996). Code switching and the complement/adjunct distinction. *Linguistic Inquiry*, 27(3), 464–479. <http://www.jstor.org/stable/4178946>
- Myers-Scotton, C. (1993). Common and uncommon ground: Social and structural factors in codeswitching. *Language in Society*, 22(4), 475–503. <https://doi.org/10.1017/S0047404500017449>
- Myers-Scotton, C. (2002). *Contact linguistics: Bilingual encounters and grammatical outcomes*. Oxford University Press, USA.
- Myers-Scotton, C. (2005). Embedded Language elements in Acholi/English codeswitching: What's going on?. *Language Matters: Studies in the Languages of Southern Africa*, 36(1), 3–18. <https://hdl.handle.net/10520/EJC59724>
- Myers-Scotton, C. M., & Jake, J. L. (2017). Revisiting the 4-M model: Codeswitching and morpheme election at the abstract level. *International Journal of Bilingualism*, 21(3), 340-366. <https://doi.org/10.1177/1367006915626588>
- Myers-Scotton, C., & Jake, J. L. (2000). Testing the 4-M model: An introduction. *International journal of bilingualism*, 4(1), 1–8. <https://doi.org/10.1177/13670069000040010101>
- Myers-Scotton, C., & Jake, J. L. (2014). Non-finite verbs and negotiating bilingualism in codeswitching: Implications for a language production model. *Bilingualism: Language and cognition*, 17(3), 511-525. <https://doi.org/10.1017/S1366728913000758>
- Mahajan, A. K. (1990). *The A/A-bar distinction and movement theory* (Doctoral dissertation).
- Niaz, S., & Ali, A. (2023). Explicit learning triggers sensory motor competence: An experimental study of Pakistani ESL learners. *Journal of Studies in Language, Culture and Society*, 6(1), 36–42. <https://asjp.cerist.dz/en/article/229872>
- Olbertz-Siitonen, M. (2021). Practical applications of naturalistic inquiry in intercultural education. *Journal of Praxis in Higher Education*, 3(2), 52–78. <https://doi.org/10.47989/kpdc127>
- Pfaff, C. W. (1979). Constraints on Language Mixing: Intrasentential Code-Switching and Borrowing in Spanish/English. *Language*, 55(2), 291–318. <https://doi.org/10.2307/412586>

- Polinsky, M., & Potsdam, E. (2001). Long-Distance Agreement and Topic in Tsez. *Natural Language & Linguistic Theory*, 19(3), 583–646. <https://doi.org/10.1023/A:1010757806504>
- Poplack, S. (1980). Sometimes I'll start a sentence in Spanish Y TERMINO EN ESPAÑOL: toward a typology of code-switching1. *Linguistics*, 18(7-8), 581–618. <https://doi.org/10.1515/ling.1980.18.7-8.581>
- Rabiah-Mohammed, F., Oudshoorn, A., Smith, M. J., Tryphonopoulos, P., & Muntaner, C. (2024). Methodological considerations in conducting bilingual study. *American Journal of Qualitative Research*, 8(3), 208–228. <https://doi.org/10.29333/ajqr/14937>
- Rahimi, M., & Dabaghi, A. (2013). Persian–English codeswitching: A test of the Matrix Language Frame (MLF) model. *System*, 41(2), 322–351. <https://doi.org/10.1016/j.system.2013.01.023>
- Sacco, S. J. (2023). Toward the systematic integration of naturalistic inquiry in LSP research. *Global Business Languages*, 23, 74–91. <https://doi.org/10.4079/gbl.v23.6>
- Sankoff, D. (1998). A formal production-based explanation of the facts of code-switching. *Bilingualism: language and cognition*, 1(1), 39–50. <https://doi.org/10.1017/S136672899800011X>
- Sankoff, D., & Poplack, S. (1981). A formal grammar for code-switching. *Paper in Linguistics*, 14(1), 3–45. <https://doi.org/10.1080/08351818109370523>
- Saram, M., Ali, A., Mahmood, A., & Naz, R. (2023). Neural trigger of speaking skills in autistic children: An intervention-based study. *Journal of Education and Social Studies*, 4(3), 424–430. <https://doi.org/10.52223/jess.2023.4302>
- Shim, J. Y. (2016). Mixed verbs in code-switching: The syntax of light verbs. *Languages*, 1(1), 8. <https://doi.org/10.3390/languages1010008>
- Si, A. (2011). A diachronic investigation of Hindi–English code-switching, using Bollywood film scripts. *International Journal of Bilingualism*, 15(4), 388–407. <https://doi.org/10.1177/1367006910379300>
- Subiyanto, A., Nurhayati, N., Suryadi, M., & Suwarno, P. (2024). Motion verbs related to Javanese traditional fishing activities: a natural semantic metalanguage approach. *Cogent Arts & Humanities*, 11(1). <https://doi.org/10.1080/23311983.2024.2338979>
- Treffers-Daller, J. (2025). The simple view of borrowing and code-switching. *International Journal of Bilingualism*, 29(2), 347–370. <https://doi.org/10.1177/13670069231168535>
- Van Gelderen, E., & MacSwan, J. (2008). Interface conditions and code-switching: Pronouns, lexical DPs, and checking theory. *Lingua*, 118(6), 765–776. <https://doi.org/10.1016/j.lingua.2007.05.003>