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Optimality Based Analysis of syntactification in Pakistani English

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Abstract:

Using Optimality Theory (OT) as a lens, this research investigates the syntactification process in Pakistani English. In order to distinguish Pakistani English from other varieties of English, the study attempts to determine the limitations and ranking processes that impact the syntactic structures that are exclusive to Pakistani English. We find particular grammatical patterns that are common in Pakistani English by examining a sample of spoken texts. Our research shows that a hierarchy of limitations that take into account the sociocultural background of Pakistan as well as the effect of the local language dictate some syntactic decisions. The research demonstrates how these limitations work together to create grammatically correct phrases, emphasizing the differences between Pakistani English and Standard British English. Our knowledge of linguistic diversity and evolution as well as the implications of these results for English instruction in Pakistan are discussed. This research adds to the subject of World Englishes by offering a thorough optimality-theoretic analysis of a little-explored English dialect.

Key Words: Syntactification, Pakistani English, Optimality Theory, Constraints

Introduction

Due to the widespread use of English over the world, several regional dialects have emerged, each with its own unique linguistic and cultural background. A notable example of a language that captures the specific sociolinguistic fabric of Pakistan is Pakistani English, a distinct variant spoken by millions of people. In order to provide a thorough understanding of the formation and constraints of syntactic structures within this variety, this research will examine the syntactification processes in Pakistani English using the framework of Optimality Theory (OT). To understand how conflicting constraints control language outputs, optimality theory—first created for phonology by Prince and Smolensky (1993)—has been expanded to syntactic analysis.

The goal of this research is to clarify how these languages affect Pakistani English's syntactic structure, resulting in a unique and dynamic variation. Examining Pakistani English is important since it is widely used in Pakistani government communication, media, and education. Gaining an understanding of its syntactic characteristics can help develop more efficient language teaching methods and provide light on the nature of linguistic diversity and change. This study can also help us better understand how English changes in multilingual

environments and how local languages influence the emergence of new English varieties. The foundation of this study is a thorough examination of a corpus of spoken and written Pakistani English.

We want to reveal the hierarchy of constraints guiding syntactic decisions in this variation through the use of Optimality Theory. Our research focuses on particular syntactic phenomena that are common in Pakistani English, such as word order, sentence structure, and code-switching. We hope that our research will advance the area of World Englishes and provide a more sophisticated knowledge of Pakistani English's syntactic traits. The next parts will comprise an overview of pertinent literature, a description of the data collecting and analysis technique, our findings, and a discussion of the consequences for theoretical linguistics and real-world language instruction.

Literature Review

Pakistani English (PE) is a unique form of English that is spoken and written in Pakistan and is shaped by the linguistic, cultural, and historical background of the nation, according to Mir & Afsar (2023). English is widely used in government, education, and the media in Pakistan, where it is officially recognised alongside Urdu. The history of Pakistani English, according to Mir & Afsar (2023), begins with the British colonial era, when English was introduced as a language of government and higher learning. Furthermore, Mir & Afsar (2023) clarify that PE has changed throughout time, absorbing phonetic components, vocabulary, and syntax from regional languages, Urdu, and Pakistani sociocultural norms. As a result of this blending, Pakistan's vast linguistic variety is reflected in its distinctive dialect.

According to Mir & Afsar (2024), one of Pakistani English's distinguishing characteristics is its vocabulary borrowings from regional tongues. English sentences frequently include words and phrases from Urdu as well as other regional languages including Punjabi, Sindhi, Pashto, and Balochi, resulting in a hybrid linguistic style. In PE, terms like "Dokaan" (Shop), "Pul" (Bridge), and "Sharbat" (Drink) are frequently employed. Furthermore, according to Mir & Afsar (2024), several idiomatic phrases and grammatical constructions in Pakistani English are impacted by regional languages, resulting in unique sentence structures and idioms that speakers of other English varieties may not be familiar with. According to Mir & Afsar (2024), Pakistani English has a distinct accent due to its varied pronunciation, which is also influenced by the phonetics of the local language. The linguistic phenomena of Pakistani English is dynamic and ever-evolving due to the dynamic interplay between English and local languages. According to Legendre (2001), the difficulty in creating generative theories of syntax has always been in balancing conflicting empirical data. There is strong evidence that the languages of the world are profoundly similar, yet there is also strong evidence that they are superficially different. There are languages that permit sentences to have no pronounced subject and languages that do; there are also languages that have prepositions, postverbal objects, and both; there are languages that shift question words to the front of the sentence and languages that leave them in the sentence. In order to meet the extended projection principle (EPP), which states that each clause must have a subject, Chomsky (1982) describes expletive subjects. For example, in Pakistani English, speakers utter sentences like "Beautiful dance," "Beautifully danced," and "Danced beautifully." According to Legendre (2001), an input-output mapping architecture is necessary for OT. For the sake of this discussion, we will assume that lexical items, functional characteristics, and predicate-argument structure provide the input for syntax optimisation. According to Legendre (2001), there are violable constraints at play, and constraint interaction produces the surface pattern. Vikner (1992) and Legendre (2001) suggest that violable restrictions are rated lower in the syntax of the statements (a–d) above. According to Prince and Smolensky (1993), the

formalisation of violability and constraint interaction results in different rankings of the same principles across different languages. Legendre (2001) outlines the following as the key theories of OT: (i) Universal well-formedness restrictions on language forms are optimised by the UG system. (ii) Well-formedness restrictions are straightforward and universal. They clash often, and the emerging form violates them rather frequently. (iii) Hierarchical rankings of restrictions are used to resolve conflicts.A constraint's effect is based on its ranking, which is decided based on the language in question. (iv) Strict dominance is the basis for evaluating applicants according to the set of restrictions. Either C1 outranks C2 or C2 outranks C1 for any two restrictions, C1 and C2. (v) Various structural realizations of an input vie to be the output that best utilizes that specific input. The ideal output is the most harmonic one, or the one that best fulfils or minimum violates the entire set of ranking constraints in a particular language. The only grammatical structure is the ideal one. (vi) The best result is produced in every competition. In Legendre et al. (1995, 1998), fidelity constraints (PARSE and FILL, Prince and Smolensky, 1993) applied to syntax are examples of freely rankable constraints. Furthermore, refer to the studies by Grimshaw, Wilson, and Woolford, Bresnan, BakoviĒ and Keer, Grimshaw, and Woolford, this book; the constraints of economy (STAY/*t, Grimshaw (1997), Legendre et al. (1995, 1998); the limitations of no-lexical movement (Grimshaw, 1997); the constraints of structure (SUBJECT, OBLIGATORY HEADS, Grimshaw (1997), etc. They are by far the most prevalent kind of limitation in this volume and other places.

Research Methodology

Data Collection

Data for the study is gathered from a variety of Pakistani English-speaking sources, including as written texts, spoken conversations, and media material. While spoken discourse is obtained through recordings of conversations, interviews, and public speeches, written texts are sourced from government documents, academic papers, novels, and newspapers. Online portals, radio programmes, and television shows are the sources of media content extraction. A well-balanced corpus of about two thousand words is assembled, guaranteeing a varied portrayal of various settings and genres. Authenticity and naturalness of language use are given priority in the selection criteria for texts and recordings.

Data Analysis

The syntactic features unique to Pakistani English are examined by using the concepts of Optimality Theory (OT) to the analysis of the gathered data. Finding situations where Pakistani English deviates from Standard English syntax is the goal of this investigation. The emphasis is on important syntactic elements such word order, subject-verb agreement, and question construction. High-ranked and low-ranked constraint violations are tracked down and classified. In order to reveal distinctive syntactic patterns and underlying limitations, the research uses a comparison method, comparing Pakistani English formulations with their Standard English equivalents.

Theoretical Framework

The theoretical foundation for this study is Optimality Theory, which offers a methodical way to comprehend syntactic differences in Pakistani English. The study revolves around three constraints: STAY (Stay in Place), OB-HD (Obligatory Head), and OPSEC (Optimal Syntactic Economy). In order to understand why some syntactic patterns are favored in Pakistani English despite possible breaches of higher-ranked constraints, the interaction and

ranking of these constraints are analyzed. The study investigates the ways in which these syntactic preferences are influenced by linguistic and cultural factors specific to the Pakistani environment.

Validation and Interpretation

A triangulation technique is used to guarantee the validity and reliability of the results. This process includes consultation with linguistic specialists who are familiar with Pakistani English, peer review, and inter-rater reliability checks. The findings are analyzed in light of the larger framework of global Englishes, taking into account the educational, social, and historical elements that make Pakistani English unique. The paper discusses possible ramifications for English language instruction in Pakistan, emphasizing how curriculum creation and language instruction might be improved by having a better grasp of regional syntactic patterns.

Data Analysis

Legendre (2001) states that competitions can be made formally explicit in tableaux like T1 below.

Table 1: Tableaux of ‘s’ as Possessive marker in Pakistani English

[it’s mine]	Subject	Possessive OBJ	‘s’ marker	Aux
a. It mine	*!			*!
b. It’ mine		*!	*	
☞c. It’s mine				*
d. its mine			*!	

Subject >> POSS OBJ>> “s” >>AUX

The pointing finger indicates which candidate is best. The left-to-right order of the constraints indicates their ranking, with the constraints on the right superseding the ones on the left. In individual cells, restrictions violations are noted as *; *! denotes fatal violations for suboptimal candidates, while Ç denotes violations committed for optimum candidates. The input consists of lexical objects like verbs, their argument structure, and tense parameters, as was already indicated. With regard to aux verbs. According to the statistics, the appropriate constraint ranking for the sentence "It's mine" in Pakistani English is Subject >> POSS OBJ >> "s" AUX. The grammar of Pakistani English gives the subject's location and accuracy the highest priority in the constraint ranking "Subject >> POSS OBJ >>'s' AUX," guaranteeing that subjects are accurately identified. After that, emphasis is placed on expressing possessive objects appropriately such that possessive connections inside noun phrases are distinct and well-formed. Lastly, consideration is given to the usage and appropriate positioning of auxiliary verbs denoted with a "s," such "is" or "has," to make sure they complement the subject and preserve grammatical agreement. According to this hierarchical ordering, which reflects the syntactic preferences particular to Pakistani English, if there is a conflict between these requirements, the proper placement of the subject will take precedence, sometimes at the expense of the correctness of the possessive object or auxiliary verb.

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Table 2: Tableaux of 'It' in Pakistani English

[It died]	Subject	Full INT
a. Died	*!	
☞b. It died		*

Subject >> FULL INT

For Pakistani English, the constraint ranking "Subject >> FULL INT" places the accurate identification and placement of the subject in sentences above all other considerations, making sure that the subject is placed prominently at the beginning of phrases. The "FULL INT" constraint, which emphasises that questions must be completely and precisely formulated with suitable question terms, auxiliaries, and subject-verb inversion where necessary, controls the full realisation of interrogative structures. This ranking shows that the correct subject placement takes precedence over guaranteeing the complete and exact creation of interrogative structures when generating sentences, especially interrogatives. This prioritisation mirrors Pakistani English syntactic preferences, where it is important to retain a precise and obvious subject position, even if doing so occasionally compromises the entire coherence of interrogative sentences.

Table 3: Tableaux of 'input PST' in Pakistani English

[It was beautifully Painted]	AL NEW VP	MIN-PROJ	SUBJ	FULL INT
☞ a. [It was]ip [beautifully painted]vp				*
a. [was]ip [beautifully painted]vp			*!	
b. [Beautifully]ip [it was painted]vp	*!		*	
c. [Painted]vp [beautifully]cp [it was]vp	*!	*		*
d. [Beautifully]cp [was it]ip [painted]vp	*!	*	*	

AL NEW $_{VP}$>> MIN-PROJ>> SUBJ>> FULL-INT

Pakistani English's constraint ranking "AL NEW VP >> MIN-PROJ >> SUBJ >> FULL-INT" prioritises a number of important components in a hierarchical sequence. The "AL NEW VP" (Align New Verb Phrase) requirement makes ensuring that new verb phrases follow Pakistani English syntactic standards by being prominently positioned and aligned. The "MIN-PROJ" (Minimal Projection) constraint, which follows, promotes the use of minimal syntactic projections and calls for simpler, more direct phrase constructions. In order to maintain clarity and grammatical correctness, the "SUBJ" (Subject) constraint makes sure that the subject is correctly identified and positioned at the beginning of sentences. The "FULL-INT" constraint, which ensures that questions are fully and precisely created with suitable question words, auxiliaries, and subject-verb inversion, is the last constraint that controls the full realization of interrogative structures. According to this hierarchical hierarchy, the alignment of new verb phrases in Pakistani English comes first, then the preference for small projections, the proper placement of subjects, and lastly the full construction of interrogative structures. This is a reflection of the syntactic preferences and priorities specific to Pakistani English, where the appropriate placement of the subject takes precedence over ensuring the full and accurate formation of interrogative structures, and new verb phrases and streamlined sentence structures are prioritized over other grammatical elements, sentences, especially interrogatives. The syntactic preferences of Pakistani English are reflected in this prioritization, where it is important to retain a clear and proper subject position, even at the expense of occasionally sacrificing the whole integrity of interrogative questions.

Table 4: Tableaux of 'AL NOTE W' in Pakistani English

[It was beautifully Painted]	AL NOTEW	AL NEW VP	MIN-PROJ	SUBJ	FULL INT
a. [It was]ip [beautifully painted]vp	*!				*
b. [was]ip [beautifully painted]vp	*!			*	
☞ c. [Beautifully]ip [it was painted]vp		*		*	
d.[Painted]vp [beautifully]cp [it was]vp		*!	*		*
e. [Beautifully]cp [was it]ip [painted]vp		*!	*	*	

AL NOTEW >> AL NEW $_{VP}$>> MIN-PROJ>> SUBJ>> FULL-INT

The grammar of Pakistani English follows a particular hierarchical sequence of syntactic priority in the constraint ranking "AL NOTEW >> AL NEW VP >> MIN-PROJ >> SUBJ >> FULL-INT". The highest priority constraint is "AL NOTEW" (Align Noteworthy parts), which makes sure that key information is highlighted for emphasis and clarity by giving precedence to very significant or noteworthy parts in a sentence and positioning them correctly. After that, the "AL NEW VP" (Align New Verb Phrase) constraint concentrates on making sure new verb phrases are syntactically well-positioned by properly aligning and emphasizing them. The usage of minimum syntactic projections, which encourage the creation of shorter, more straightforward sentence structures, is therefore encouraged by the "MIN-PROJ" (minimum Projection) constraint. Grammar integrity and clarity are maintained by adhering to the "SUBJ" (Subject) constraint, which guarantees the proper identification and placement of the subject at the beginning of sentences. Last but not least, the "FULL-INT" (Full Interrogative) constraint controls how interrogative structures are fully produced. It guarantees that questions are correctly and completely constructed, including subject-verb inversion, auxiliaries, and proper question terms. According to this rating, Pakistani English gives priority to notable features and novel verb phrases. It also favors simpler syntactic structures, appropriate subject placement, and full interrogative formulation. This hierarchy represents Pakistani English syntactic preferences, which priorities highlighting pertinent information and preserving distinct verb phrases and subjects above more intricate sentence constructions and fully formed interrogatives.

[It was beautifully Painted]	MIN-PROJ	SUBJ	FULL INT
☞ a. [It was]ip [beautifully painted]vp			*
B. [was]ip [beautifully painted]vp		*	
c. [Beautifully]ip [it was painted]vp		*	
d.[Painted]vp [beautifully]cp [it was]vp	*		*
E. [Beautifully]cp [was it]ip	*	*	

[painted]vp			

Table 5: Tableaux of ‘AL NOTE W’ in Pakistani English

MIN-PROJ>> SUBJ>> FULL-INT

The grammar of Pakistani English follows a particular hierarchical sequence of syntactic priority in the constraint ranking "MIN-PROJ >> SUBJ >> FULL-INT". The usage of minimum syntactic projections, which encourage the creation of shorter, more straightforward sentence structures, is therefore encouraged by the "MIN-PROJ" (minimum Projection) constraint. Grammar integrity and clarity are maintained by adhering to the "SUBJ" (Subject) constraint, which guarantees the proper identification and placement of the subject at the beginning of sentences. Last but not least, the "FULL-INT" (Full Interrogative) constraint controls how interrogative structures are fully produced. It guarantees that questions are correctly and completely constructed, including subject-verb inversion, auxiliaries, and proper question terms.

According to this rating, Pakistani English gives priority to notable features and novel verb phrases. It also favours simpler syntactic structures, appropriate subject placement, and full interrogative formulation. This hierarchy represents Pakistani English syntactic preferences, which prioritise highlighting pertinent information and preserving distinct verb phrases and subjects above more intricate sentence constructions and fully formed interrogatives. Furthermore, in the framework of minimalist syntax and the theory of phases, the constraints "MIN-PROJ," "SUBJ," and "FULL-INT" imply varying degrees of syntactic and semantic limits within linguistic theory. The term "MIN-PROJ" (Minimal Projection) describes the lowest level of syntactic projection, when the bare minimum of structure is produced to meet syntactic criteria. A subject is required in a clause in order to satisfy the Extended Projection Principle (EPP) in sentence construction, as the "SUBJ" (Subject) requirement highlights. Following the rule that all syntactic characteristics must be interpretable at the interfaces (phonological form and logical form), "FULL-INT" (Full Interpretation) makes sure that each element in the syntactic structure has a clear semantic interpretation. Together, these restrictions ensure that sentences are both minimally structurally and semantically complete by striking a balance between syntactic economy and semantic clarity.

[It was beautifully Painted]	MIN-PROJ	SUBJ	FULL INT
a. [It was]ip [beautifully painted]vp			*
C. [was]ip [beautifully painted]vp		*	
c. [Beautifully]ip [it was painted]vp		*	
d.[Painted]vp [beautifully]cp [it was]vp	*		*
F. [Beautifully]cp [was it]ip [painted]vp	*	*	

Table 6: Tableaux of 'come' in Pakistani English

[He will come to the party]	Opt-SyEC	OBL-HD	ST-PL
a. [He will]ip [Come to the party]vp			
b.[will]ip [come to the party]vp	*!		
c. [Come to the party]vp		*!	
d. [$_{CP}$Will] [he]$_{IP}$[Come to the party] vp			*!

OPSEC>> OB-HD>> STAY

In language analysis, the constraints "OPSEC," "OB-HD," and "STAY" stand for hierarchical principles that control syntactic structures under Optimality Theory (OT). "OPSEC" stands for "Optimal Syntactic Economy," which places emphasis on creating syntactic structures that are as efficient as possible by reducing pointless projections and movements in order to provide the simplest form. This restriction aims to preserve effectiveness and steer clear of unnecessary components while constructing sentences. All phrases are required to have a "OB-HD" (Obligatory Head), which guarantees that each syntactic unit is correctly headed and structurally complete. This restriction highlights how important heads are to preserving the harmony of syntactic sentences. "STAY" stands for "Stay in Place," which advocates for components to stay in their original places inside the syntactic framework until higher-ranked requirements force them to relocate. In syntactic configurations, it helps to preserve locality and restrict displacement. These constraints work in a ranked manner to ensure that the syntactic output is both structurally and functionally economical. Specifically, "OPSEC" drives the structure's overall economy, "OB-HD" ensures that there are heads, and "STAY" limits needless movement.

Table 7: Tableaux of 'what', "where" in Pakistani English

[What things will be put where ?]	Opt-SyEC	OBL-HD	ST-PL
a. [What will]ip [[things will be put where]]vp	*		*
a. [$_{CP}$What will]ip [[where] [things will be put]]vp	*!		***!

OPSEC>> OB-HD>> STAY

Both candidates break the highest-ranked constraint (OPSPEC), yet one remains optimal. This demonstrates that violating high-ranked constraints isn't always detrimental. Interestingly, swapping the two wh-phrases and fronting "where" instead of "what" would still breach OPSPEC, as would leaving both wh-phrases in place, causing two violations of OPSPEC. No candidate for this input can avoid violating the highest-ranked constraint. Therefore, the decision depends on a lower-ranked constraint, in this case, STAY. In fact, both candidates infringe upon STAY, but candidate (a) does so to a lesser extent. The constraints "OPSEC," "OB-HD," and "STAY" represent hierarchical principles within Optimality Theory (OT) that govern syntactic structures in linguistic analysis. "OPSEC" stands for "Optimal Syntactic Economy," which places emphasis on creating syntactic structures that are as efficient as possible by reducing pointless projections and movements in order to provide the simplest form. "OPSEC" stands for "Optimal Syntactic Economy," which places emphasis on creating syntactic structures that are as efficient as possible by reducing pointless projections and movements in order to provide the simplest form. This restriction aims to preserve effectiveness and steer clear of unnecessary components while constructing sentences. All phrases are required to have a "OB-HD" (Obligatory Head), which guarantees that each syntactic unit is correctly headed and structurally complete. This restriction highlights how important heads are to preserving the harmony of syntactic sentences. "STAY" stands for "Stay in Place," which advocates for components to stay in their original places inside the syntactic framework until higher-ranked requirements force them to relocate. In syntactic configurations, it helps to preserve locality and restrict displacement. These constraints work in a ranked manner to ensure that the syntactic output is both structurally and functionally economical. Specifically, "OPSEC" drives the structure's overall economy, "OB-HD" ensures that there are heads, and "STAY" limits needless movement.

Conclusion

This study has offered a thorough examination of Pakistani English syntactification from the perspective of Optimality Theory (OT). The study found a number of distinctive syntactic features, such as differences in word order, subject-verb agreement, and question construction, that set Pakistani English apart from Standard English. Key OT restrictions, such as STAY (Stay in Place), OB-HD (Obligatory Head), and OPSEC (Optimal Syntactic Economy), were used to analyze these discrepancies. The results show that although certain high-ranked constraints are broken in Pakistani English, the resultant structures nonetheless follow lower-ranked constraints, indicating that syntactic preferences in this English variety are both systematic and flexible. There are important theoretical ramifications when using Optimality Theory to analyze Pakistani English. It emphasizes how flexible OT is in accommodating syntactic variance across various English dialects. The study demonstrates how local variants may emerge even within a single overarching language framework, like English, as a result of the interaction of restrictions evaluated differently depending on linguistic and cultural settings. This lends credence to the idea that Optimality Theory is a stable and adaptable model for syntactic analysis, able to take into account a large number of language changes and events.

The knowledge gathered from this study will have a significant impact on English language instruction in Pakistan. Comprehending the distinct syntactic features of Pakistani English might aid educators in crafting more efficacious pedagogical approaches that recognise and integrate these regional variances. Improved understanding and English usage among Pakistani learners might result from more relevant and inclusive language training. Teachers should encourage students to embrace the diversity within the English language and foster a more global and pluralistic vision of English language ability by acknowledging Pakistani English as a legitimate version of the language. Even though this study has significantly advanced our knowledge of Pakistani English syntactification, there is still much room for

further investigation. To create a more complete picture, additional research might look into other syntactic elements like the usage of passive constructions or negation patterns. Further studies should look at how other languages spoken in Pakistan affect English syntax, providing further insight into the processes of syntactic convergence and linguistic contact. It would also be beneficial to do longitudinal research looking at how Pakistani English syntax has changed over time, especially in light of the continuous globalization and its effects on language usage. Through further investigation into these domains, scholars can expand upon the groundwork established by this investigation, thereby augmenting our comprehension of Pakistani English and its positioning in the wider context of World Englishes.

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