

Mapping Segmental Variations in Pakistani English: A Sociophonetic Study

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ABSTRACT

English serves as a de facto official language, coexisting with indigenous languages like Urdu, Punjabi, and Pushto, and this linguistic environment has led to unique phonetic adaptations in Pakistani English. The study specifically explores pronunciation patterns influenced by these indigenous languages, focusing on phoneme borrowing, sound assimilation, retroflex articulations, and the substitution of interdental sounds with dental ones. The objective of this study is to examine the segmental phonological characteristics of Pakistani English, a distinctive non-native English variety shaped by the multilingual landscape of the country. The data, collected from BS English students at the University of Sargodha, grouped into three, based on their native languages, i.e., Urdu, Punjabi, and Pushto, highlights phonetic tendencies particular to each language background, reflecting both linguistic and socio-cultural factors. Findings indicate how Pakistani English incorporates local language traits, establishing a unique identity in the backdrop of World Englishes. The study, using a descriptive-analytical approach, not only contributes to the understanding of the phonology of Pakistani English but also suggests implications for English language teaching in Pakistan and calls for further research into South Asian Englishes.

Keywords: Pakistani English; phoneme borrowing; phonological landscape; phonetic adaptations

INTRODUCTION

English has become an integral component of both official and academic domains in the Indian subcontinent. The historical trajectory of English in this region, particularly in Pakistan, is characterised by several pivotal milestones. One of the most notable moments in its development was the declaration of Macaulay's Minutes in 1835. While Macaulay's vision of anglicising the subcontinent did not entirely come to fruition, the colonial period firmly established English education, ensuring its enduring influence (Kumar, 2018).

Over the past two centuries, global power has predominantly been concentrated in the hands of two English-speaking nations, thereby solidifying the linguistic dominance of English worldwide (Crystal, 1997; Tomlinson, 2008). Although the British Empire experienced a decline and relinquished its colonies during the mid-twentieth century, losing its status as a global

superpower, particularly after the Second World War, the mantle of power transitioned seamlessly to another English-speaking nation—the United States of America. This shift in dominance did not diminish the global status of English. On the contrary, the emergence of the United States as the sole superpower in the late twentieth century further bolstered the prominence of English on a global scale, with the subcontinent being no exception.

Today, English plays a multifaceted role in the subcontinent, functioning as the official language of several countries, including Pakistan, serving as a medium of instruction in higher education, and acting as a lingua franca among educated individuals in linguistically diverse settings. This linguistic scenario has fostered distinctive language patterns shaped by the interplay of local languages and socio-cultural influences (Ali, 2013). In Pakistan, English is recognised as the de facto official language according to the 1973 Constitution of Pakistan (Refworld - UNHCR's Global Law and Policy Database, 2025). The Constitution initially stipulated that English would retain its status as the official language for 15 years from its promulgation, during which the government would facilitate the transition to Urdu as the official language. However, no substantial efforts have been undertaken to achieve this goal, and English continues to hold its status as the country's official language.

The evolution and adaptation of English in Pakistan have resulted in notable variations across multiple linguistic levels, particularly in phonology. These divergences are attributed to the influence of mother tongues on the articulatory mechanisms of Pakistani speakers. For instance, the oral cavity in Pakistani English pronunciation is often observed to be more open compared to Standard British English (SBE), a feature shaped by the phonological patterns of indigenous languages. Scholars have recognised these phonetic distinctions as defining characteristics of Pakistani English, underscoring the intricate nature of language variation within the Pakistani linguistic landscape (Baumgardner, 1993; Tallat, 2002, 2003).

The adoption and adaptation of English in Pakistan have led to phonological features influenced by local languages, including Urdu, Punjabi, Sindhi, and Pashto (Hickey, 2005; Mahboob & Ahmar, 2004a, 2004b; Schneider, 2007, 2010). These features make Pakistani English a unique variety in the broader context of World Englishes. This linguistic hybridity underscores the complex interaction between English and indigenous languages, shaped by historical, social, and educational contexts.

Rahman (1990) provided a foundational framework for understanding Pakistani English by categorising it into four distinct varieties based on sociolinguistic and functional criteria: Acrolectal, Mesolectal, Basilectal, and Educated Standard Pakistani English. This classification highlights the diversity and stratification of English use in Pakistan, driven by factors such as education, social status, and regional background.

The current study explores the phonetic characteristics of Pakistani English, shedding light on the linguistic characteristics that distinguish it from its British counterpart. Drawing upon insights from linguistic research and socio-cultural analysis, the study seeks to deepen our understanding of the intricate interplay between language, identity, and societal dynamics in the Pakistani context. The study also addresses the pronunciation problems faced by Pakistani learners caused by the variation of phonemes, i.e. vowels and consonants, and tries to present a solution by identifying that these variations are not errors but differences.

The phonological characteristics of Pakistani English present a fascinating field of study in the broader context of World Englishes. Pakistani English has developed its distinct features due to historical, social, and linguistic influences, especially from the native languages spoken in Pakistan, such as Urdu, Punjabi, Sindhi, Pashto, and Balochi. This literature review aims to provide

an in-depth analysis of the existing scholarly work on the phonological characteristics of Pakistani English, focusing particularly on segmental features and the influence of native languages.

AIMS AND OBJECTIVES

The aims and objectives of the study include:

- To investigate the segmental phonological characteristics of Pakistani English
- To identify variations in pronunciation in Pakistani English, particularly due to the influence of Indigenous languages

RESEARCH QUESTIONS

The following are the specific study questions:

- What are the distinctive segmental phonological characteristics (i.e. vowels and consonants) that define Pakistani English?
- In what ways do the phonemic inventories of indigenous languages impact the pronunciation in Pakistani English?

THEORETICAL BACKGROUND

Numerous studies have explored the intricacies of the English language in the subcontinent. Kumar (2018) notes that a comprehensive survey across postcolonial cities unveils diverse varieties of English influenced by regional languages and the mother tongue of the speaker. The prevalence of multilingualism in the subcontinent poses challenges in the teaching and learning of English, primarily due to the stark contrast between English—a non-phonetic language—and phonetic Indian languages. This linguistic dichotomy underscores the need for a paradigm shift in syllabi design, accounting for the vast geographical and linguistic diversity across the country. Consequently, a proliferation of English coaching centres and institutes has emerged to address these challenges (Bansal, 1990; Pandey, 2015).

In response to these issues, Kumar (2018) proposes the adoption of a 'Functional English' approach, which integrates both the form and function of the language. This approach aims to equip students with practical language skills essential for everyday communication and future endeavours. Emphasising the importance of phonetics, Kumar (2018) advocates for the inclusion of pronunciation instruction in English education alongside vocabulary enrichment and grammatical structure. Implementing a specialised Functional English Course tailored to the needs of students is deemed imperative to bridge the gap between theoretical knowledge and practical application.

Moreover, Rajendran et al. (2021) conducted a study on lexical stress perception among adult English speakers in the subcontinent. Their findings reveal that participants exhibit varying degrees of accuracy in perceiving lexical stress in non-idiomatic words, with private school attendees demonstrating higher accuracy rates compared to their public school counterparts. Additionally, Maxwell and Fuchs (2019) suggest that schooling significantly influences variability in pronunciation, with no systematic effect observed based on participants' first language background.

Pakistan is witnessing a growing demand for English language education, with a variety of English courses now available across the country. These courses encompass ELT (English Language Teaching), TEFL (Teaching of English as a Foreign Language), TEFOL, Masters in English programmes, English Diplomas, and Spoken English Courses (Sarwar & Rashid, 2022).

English has gained prominence in Pakistan, becoming the language widely used in media, trade, and scientific fields. Consequently, English language instruction has become mandatory in nearly all schools and colleges nationwide. This recognition of English's importance underscores its pivotal role in communication, education, and global engagement.

Phonological features of Pakistani English have been explored by many scholars and researchers (Bilal & Asghar, 2023; Bilal et al., 2011a, 2011b, 2021; Malik et al., 2022). They have described consonants, vowels, and stress patterns of Pakistani speakers of English in different sociolinguistic contexts. Bilal et al. (2011) conducted an acoustic study on the front vowels of Pakistani English and concluded that Pakistani speakers distinguished among all four front vowels. Similar results were reported by Malik et al. (2022), who conducted their research on English speakers in Pakistan in various linguistic contexts. But they (Bilal et al., 2012) came up with the conclusion that there are only two central vowels, i.e. low-central /ʌ/ and mid-central /ə/, thus distinguishing Pakistani English from that of SBE. The absence of /ə/ in Pakistani English is reported by Bilal and Asghar (2023). In another study, Bilal et al. (2021) concluded that Pakistani English has four back vowels, and the low and mid-back vowels are merged. Asghar et al. (2020) reported the monophthongisation of some of the diphthongs of SBE by Pakistani speakers of English.

Despite these insights, a comprehensive examination of the phonetic peculiarities of Pakistani English remains scarce in the literature. This study seeks to fill this gap by exploring the distinctive aspects of Pakistani English pronunciation, shedding light on the distinctive segmental phonetic features that distinguish it from other varieties of English. By building upon existing research and incorporating empirical data, this study aims to understand better the complex dynamics shaping Pakistani English phonology.

REVIEW OF THE EXISTING LITERATURE

Numerous qualitative and quantitative studies have examined the linguistic features of Pakistani English, particularly its phonological characteristics. A key trait shared by many Asian English varieties, including Pakistani English, is the limited use or complete absence of the schwa /ə/, often resulting in the substitution or blending of central vowels. Deterding (2005) identified a prevalent tendency to avoid reduced vowels in Southeast Asian Englishes, such as those spoken in Singapore, Brunei, and other ASEAN nations, as well as China. This tendency often leads to less distinct differentiation between vowel sounds such as /ʌ/ and /ə/, /a/ and /ɔ/, and /ɛ/ and /æ/. For instance, in Philippine English, the schwa /ə/ is frequently absent, causing pronunciations like 'banana' to sound as /bænænæ/ instead of /bə'nænə/ (Gonzalez & Alberca, 1978). Indian English similarly exhibits comparable phonological patterns. Kachru (2005) highlighted an inconsistent distinction between strong and weak vowels, while Sailaja (2009) noted the occasional neutralisation of /ʌ/ and /ə/ in Standard Indian English Pronunciation. For example, Indian English speakers might pronounce 'but' and 'bat' more similarly than their counterparts in SBE.

Korean English phonology also displays distinctive traits that stem from the interaction between Korean phonotactic rules and English phonological structures. These characteristics significantly influence the intelligibility of Korean speakers' English, particularly in situations where English functions as a lingua franca. A notable feature is epenthesis, where additional vowels are inserted to break up consonant clusters, potentially leading to communication misunderstandings (Barrass et al., 2020). Additionally, substitution patterns are common, with nasals frequently replacing plosives between vowels, which can compromise clarity (Barrass et al., 2020). Another challenge arises from vowel mergers, where specific English vowel distinctions are conflated in Korean phonology, complicating pronunciation and comprehension (Kwon, 2019).

The adaptation of English loanwords into Korean further illustrates this interplay. English consonant sequences are often modified to align with Korean phonological constraints, such as the insertion of vowels or adjustments based on perceived morphological structures (Tak, 2012). The vowel adaptation process is similarly influenced by Korean vowel harmony, where vowels are categorised into 'light' and 'dark' groups, affecting how English vowels are integrated into Korean (Harkness, 2012). Korean speakers of English also encounter difficulties with sound contrasts that are absent in their native language. For instance, sounds like word-final /ɹ/ and /j/ often result in errors such as vowel deletion, which further challenges pronunciation (Lim & Seo, 2016).

Pakistani English also reflects these broader regional trends while incorporating unique features. Mesthrie and Bhatt (2008) identified six distinct short vowels in Pakistani English, noting the distinct rhotic quality of the nurse /ɜ:/ vowel, influenced by local linguistic patterns. For instance, words like 'nurse' might be articulated closer to /nɜ:rs/ with a pronounced rhotic quality. Additionally, Mahboob and Ahmar (2004a) emphasised that phonotactic constraints from Urdu significantly influence vowel articulation in Pakistani English. These constraints often result in resyllabification and the insertion of epenthetic vowels, particularly in loanwords. For example, 'school' is often pronounced as /is'ku:l/ instead of /sku:l/, and 'style' as /i'stail/ instead of /stail/, reflecting the influence of Urdu's syllable structure. This interplay of linguistic influences illustrates how the phonology of Pakistani English has been shaped by both regional language patterns and broader trends in Asian Englishes, offering a rich field for further exploration in the context of World Englishes.

SEGMENTAL FEATURES IN PAKISTANI ENGLISH

VOWELS

Pakistani English vowels exhibit several distinctive features influenced by the phonological systems of native languages. One prominent characteristic is the reduced distinction between long and short vowels, often resulting in minimal pairs being pronounced similarly. For example, words like "ship" /ɪ/ and "sheep" /i:/ are frequently articulated with identical vowel sounds, which reduces the phonemic contrast (Mahboob & Ahmar, 2004a). This phenomenon may be attributed to the influence of native phonologies, where vowel length distinctions are less emphasised.

The diphthongs in Pakistani English also undergo noticeable changes, with diphthongal vowels often being monophthongised. For instance, /eɪ/ in the face is typically realised as /e/, and /aɪ/ in price as /a:/ (Baumgardner, 1993; Bilal et al., 2020; Raza, 2008). This simplification aligns with the tendency of native languages to favour monophthongs over diphthongs, resulting in more stable vowel realisations. These modifications not only affect individual vowel quality but also contribute to the overall phonological identity of Pakistani English (Rahman, 1990).

Another key feature is the limited use of the central vowel schwa /ə/. Instead of the schwa, full vowels are often employed, as seen in pronunciations like *sofa*, where the second syllable is articulated with /oo/ or /a/ rather than the reduced schwa (Bilal & Asghar, 2023; Kachru, 1994). For example, /ə'bout/ is pronounced as /ʌ'baut/. This substitution significantly influences the rhythm of Pakistani English, leaning towards a syllable-timed rather than a stress-timed rhythm, which is characteristic of (SBE). The syllable-timed nature emphasises each syllable equally, diverging from the rhythmic pattern of stress-timed varieties.

The absence of the schwa and its replacement with full vowels is a particularly distinguishing feature of Pakistani English (Mahboob & Ahmar, 2004a). Bilal et al. (2011) identified only two central vowels in this variety and noted the conspicuous absence of the schwa. This pattern results in less vowel reduction in unstressed syllables, creating distinct pronunciations that reflect the influence of native phonological systems. A merger of low back vowels /ɒ/ and /ɔ:/ is also reported in Pakistani English (Bilal et al., 2021)

Mesthrie and Bhatt (2008) provide further insights into the vowel inventory of Pakistani English, identifying six short vowels and highlighting the unique realisation of the nurse vowel /ɜ:/. In Pakistani English, this vowel exhibits rhoticity, a feature that distinguishes it from non-rhotic varieties of English like SBE. The rhotic quality is heavily influenced by the phonological traits of local languages such as Urdu and Punjabi, where rhotic sounds are more pronounced.

Overall, these segmental features, i.e. vowel length neutralisation, diphthong monophthongisation, the absence of the schwa, and the rhotic nature of specific vowels, paint a comprehensive picture of the distinctive phonological characteristics of Pakistani English. These traits not only differentiate it from native English varieties but also underscore the dynamic interplay between English and the indigenous languages of Pakistan.

CONSONANTS

Pakistani English exhibits several distinctive consonantal features shaped by the phonological constraints of native languages, particularly Urdu and regional tongues such as Punjabi, Sindhi, and Pashto. One prominent feature is the substitution of alveolar plosives /t/ and /d/ with dental plosives [t̪] and [d̪]. This reflects the influence of Urdu, where dental plosives are the default articulation for these phonemes (Mahboob & Ahmar, 2004a, 2004b). For example, words like 'time' and 'day' may be pronounced with a distinct dental quality, making them sound slightly different from their (SBE) counterparts.

Another notable characteristic is the use of retroflex consonants, which are common in the phonological systems of native languages. Retroflex stops /ɖ/ and /ɟ/ are frequently used instead of their alveolar counterparts /d/ and /t/, particularly by L1 Urdu speakers (Baumgardner, 1993). For instance, 'table' might be articulated with a retroflex /ɟ/, distinguishing it phonetically from the standard pronunciation in SBE. This retroflexion is a hallmark of South Asian Englishes, reflecting the deep-rooted influence of local phonological norms.

The dental fricatives /θ/ and /ð/, which are absent in most native Pakistani languages, are typically replaced by stops or other fricatives. Common substitutions include /th/ for /θ/ and /d/ for /ð/, leading to pronunciations such as /think/ for /θink/ or /dat/ for /ðat/ (Mahmood et al., 2011; Rahman, 1990; Shabbir et al., 2013). These substitutions mirror patterns found in other non-native varieties of English, where dental fricatives are also non-existent in the native phoneme inventory (Deterding, 2005).

The palato-alveolar affricates /tʃ/ and /dʒ/, as in ‘church’ and ‘judge’, are largely maintained in Pakistani English. However, their articulation often reflects native phonetic environments, particularly those of Urdu and Punjabi. The affricates may be pronounced with a slightly retracted tongue position or with more aspiration, depending on the speaker's regional background (Mahboob & Ahmar, 2004a). For example, /tʃ/ may be pronounced with a sharper release of air, resembling the native Urdu equivalent.

Another feature is the aspiration of voiceless plosives /p/, /t/, and /k/. While aspiration is not phonemic in native Pakistani languages, its usage in English is inconsistent. Some speakers may aspirate these plosives excessively, while others might omit aspiration altogether, leading to less distinction between pin and bin (Baumgardner, 1993). This inconsistency is indicative of varying levels of exposure to English and the influence of local phonetic norms.

The rhoticity in Pakistani English varies significantly across regions and social strata. In many cases, the /r/ sound is articulated as a trill or a tap, influenced by the phonetic realisations of /r/ in Urdu and Punjabi. For instance, red may be pronounced with a rolled /r/ instead of the approximant /ɹ/ typical in SBE (Mesthrie & Bhatt, 2008). This rhotic quality contributes to the distinctiveness of Pakistani English and aligns it with other rhotic varieties of English globally. Pakistani English speakers cannot distinguish between clear /l/ and dark /l/ (Mahboob & Ahmar, 2004a) and /v/ and /w/ (Syed et al., 2017).

The consonantal features of Pakistani English—such as the substitution of dental and retroflex plosives, replacement of dental fricatives, and variations in affricate articulation, underscore the profound influence of native phonological systems. These features not only define the phonetic identity of Pakistani English but also highlight the dynamic interplay between global English and local linguistic ecologies.

INFLUENCE OF INDIGENOUS LANGUAGES ON SEGMENTAL PHONOLOGY OF PAKISTANI ENGLISH

INFLUENCE OF URDU

Urdu, the national language of Pakistan, exerts a strong influence on Pakistani English phonology. Urdu speakers often substitute English phonemes with their closest Urdu equivalents, particularly dental and retroflex consonants (Rahman, 1990). Resyllabification in Pakistani English is caused by the influence of Urdu phonology, i.e. segment alternation, ellipsis and epenthesis (Farooq & Mahmood, 2021). Urdu has seventeen more consonants than SBE, which influences the pronunciation pattern of Pakistani speakers of English (Munir & Ifftikhar, 2024). The prosodic features of Urdu, such as syllable timing and stress patterns, significantly affect the rhythm and intonation of Pakistani English (Baumgardner, 1993).

INFLUENCE OF INDIGENOUS REGIONAL LANGUAGES

Speakers of regional languages such as Punjabi, Sindhi, Pashto, and Balochi also bring distinct phonological traits to their English pronunciation. Punjabi speakers may exhibit gemination, or the lengthening of consonants, influenced by Punjabi phonology (Mahboob & Ahmar, 2004a). Punjabi speakers often exhibit gemination, or the lengthening of consonants, when speaking English. This feature is a direct influence of Punjabi phonology, where gemination is phonemic. A Punjabi speaker might pronounce *butter* as [bʌt:ə], with a noticeably lengthened /t/. Mahboob and Ahmar (2004a) report that this lengthening is common among Punjabi speakers of English and can impact

intelligibility in international contexts. Additionally, retroflexion is prominent, with Punjabi speakers often replacing English alveolar stops /t/ and /d/ with retroflex stops [ʈ] and [ɖ].

Sindhi speakers might retain voiced implosives, a feature of Sindhi phonology, in their English speech (Kachru, 1994). Sindhi speakers retain voiced implosives, a distinctive feature of Sindhi phonology, in their English speech. Sindhi includes sounds such as [ɓ], [ɗ], and [ɠ], which have no equivalent in English. A Sindhi speaker may produce a word like *bad* with a slightly implosive [bæɗ] instead of the English-voiced bilabial plosive /b/. Kachru (1994) identifies the persistence of implosives as a characteristic trait of Sindhi-influenced English. Sindhi speakers also tend to simplify consonant clusters, often inserting epenthetic vowels to break them.

The vowel length distinctions in Pashto, such as longer vowels, can influence English pronunciation, leading to elongated vowels in Pakistani English (Baumgardner, 1993). The emphasis of the Pashto phonological system on vowel length distinctions influences English pronunciation, leading to elongated vowels in Pakistani English. A Pashto speaker might pronounce *bit* and *beat* both with a longer vowel, potentially rendering them as [bi:t]. Baumgardner (1993) observes that Pashto speakers often carry over their native long vowels into English, sometimes causing confusion between minimal pairs. Pashto speakers also exhibit strong aspiration for voiceless stops, exceeding typical English aspiration. Rahman (1990) highlights this exaggerated aspiration as a defining feature of Pashto-influenced English.

The phonological traits of Punjabi, Sindhi, Pashto, and Balochi introduce rich variation into Pakistani English, making it distinct from other World Englishes. These influences—whether through gemination, implosives, vowel length, or rhoticity—reflect the deep interplay between local linguistic systems and English. Understanding these variations is essential for appreciating the diversity within Pakistani English and for designing context-appropriate English language teaching strategies.

PHONOLOGICAL VARIABILITY WITHIN PAKISTANI ENGLISH

Pakistani English is not monolithic; it exhibits significant regional and sociolectal variability.

REGIONAL VARIATIONS

The phonological characteristics of Pakistani English vary significantly across different regions of the country, reflecting the influence of local linguistic environments. In urban centres like Karachi, Lahore, and Islamabad, speakers exhibit fewer regional phonetic traits and greater alignment with (SBE). This phenomenon can be attributed to increased exposure to English-medium education and extensive interaction with English through television, social media, and other forms of mass communication (Mahboob & Ahmar, 2004a, 2004b). In contrast, provincial regions exhibit more pronounced phonological features shaped by their native languages. These regional influences create a rich tapestry of phonological diversity within Pakistani English, reflecting the linguistic heritage of the country's various ethnic and cultural groups. While urban speakers tend to converge towards a more standardised English, provincial speakers maintain phonetic traits that showcase the interplay between their native languages and English.

SOCIOLECTAL VARIATIONS

Social factors, including education, socioeconomic class, and exposure to native English speakers, play a pivotal role in shaping the phonological features of Pakistani English. Individuals with higher education levels, especially those who have studied in English-medium institutions, tend to approximate British or American English phonology more closely (Kachru, 1994). Increased interaction with English-language media, such as television, films, and online platforms, often influences the adoption of native English phonological features. However, the degree of influence varies significantly among speakers, depending on their level of engagement with English media and the strength of their native phonological systems (Rahman, 1990). These factors highlight the interplay between societal conditions and linguistic practices, underscoring how phonological variation in Pakistani English reflects broader educational and cultural dynamics.

Mahboob and Ahmar (2004a) have highlighted phonological disparities within Pakistani English, noting differences in both pure vowels and diphthongs compared to SBE. These differences are not uniform across all speakers, with variations influenced by factors such as regional background, educational level, and exposure to native English varieties. Previous studies by Bilal et al. (2011, 2021), Abbasi et al. (2019), and Farooq and Mahmood (2017, 2018) have examined these phonological characteristics in detail, providing a comprehensive understanding of the unique features of Pakistani English.

METHODOLOGY

This study employs a descriptive-analytical (DA) research approach, which integrates observation, generalisation, and interpretation as its core components. The DA method merges descriptive and analytical techniques, enabling researchers to first document and characterise the attributes of a phenomenon through observational methods. Subsequently, these descriptions are examined to uncover patterns, relationships, or underlying factors. By combining detailed descriptions with in-depth analysis, this approach offers a holistic understanding of the phenomenon, emphasising both its features and its broader implications. Widely applied in disciplines such as social sciences and education, the DA approach is particularly effective for systematically exploring complex and multifaceted phenomena (Cote, 2021).

In social sciences, observation is a pivotal research method, encompassing diverse techniques tailored to the specific research problem and its scientific context. It plays a vital role in daily life, enabling the study of behaviours and interactions with the material environment (Ciesielska et al., 2018).

Generalisation, by contrast, involves identifying shared properties from particular instances to develop broader concepts or claims. This process defines a domain or group of elements and highlights their common attributes, serving as the basis for deductive reasoning. These generalisations, however, must be verified to confirm their applicability in varying contexts.

To thoroughly examine the phonological features of speech, this study incorporates a comparative method to trace trends in the evolution of the phonological system in the language. The study seeks to deliver an exploration of the phonetic characteristics of English in Pakistan, focusing on phonemic variations. This approach highlights the unique features and developmental mechanisms shaping Pakistani English.

PROCEDURE

The DA research approach combines descriptive and analytical methods to provide a comprehensive understanding of a phenomenon. This approach was applied in two stages: the descriptive stage, which involved collecting detailed observations and systematically describing the characteristics, behaviours, or patterns of the subject under study without manipulating variables, and the analytical stage, which focused on interpreting, categorising, and analysing the collected data to identify relationships, patterns, trends, or underlying mechanisms.

Students from the BS English programme at the University of Sargodha were selected as participants and grouped based on their native languages: Punjabi, Pashto, and Urdu. Each group was further categorised by gender. Participants engaged in English-language activities, including group discussions and face-to-face interviews. Initially, group-specific topics were provided for discussion, followed by open cross-group debates. All conversations and interviews were recorded for subsequent analysis. The words were extracted and documented for phonemic analysis.

The DA method was applied to examine phonemes, focusing on pronouncing vowels and consonants. Phonetic features were identified systematically using phonetic transcription. The phonemes were compared with those of their British counterparts, and the differences and variations were recorded. These transcriptions were analysed to detect trends and variations in phoneme usage, providing insights into the linguistic differences influenced by the participants' native languages.

RESULTS

The phonetic characteristics of Pakistani vernacular languages create significant challenges for learners in mastering English phonemes. One common issue is the difficulty in distinguishing between the /f/ and /v/ sounds, particularly for Pashtoon speakers, where substitutions such as /v/ for /f/ often occur. Aspirated plosives like /p/, /t/, and /k/ also present challenges, as many Pakistani speakers tend to pronounce these sounds as their unaspirated or voiced counterparts, regardless of their position in a word.

Distinct phonetic variations in Pakistani English include the substitution of alveolar consonants [t] and [d] with retroflex counterparts [ɖ] and [ɗ], reflecting the influence of regional languages like Punjabi and Sindhi. Additionally, the rhotic sound [r] is frequently articulated as a trill or flap at all positions of the syllable, i.e. onset and coda, diverging from the approximant [ɹ] in Standard SBE. The dental fricatives [ð] and [θ], absent in most Pakistani languages, are often replaced by plosives, with [ð] pronounced as [d] and [θ] as [t̪].

Moreover, the nasal velar consonant [ŋ] is articulated as a sequence of sounds [n] and [g], leading to altered pronunciation, such as 'sing' being rendered as [sɪŋg] instead of /sɪŋ/. This feature retains its distinction in all phonological contexts. Similarly, the labio-dental fricative [v] has replaced the approximant [w], pronouncing 'wine' like 'vine'.

Other deviations include the tendency to retain syllabic patterns and avoid vowel reduction common in English, e.g. /ti:tʃə(r)/ is pronounced as /ti:tʃʌr/. Aspiration of consonants like [bh], [gh], [ʃh], and [dʒh]—typical in local languages—also carries over into English, resulting in more consonants as compared to SBE, e.g. /gəʊst/ is articulated as /gʰost/.

The phenomena highlight the influence of native phonologies on the development of Pakistani English, creating a distinct accent and pronunciation pattern. Studies such as Mahboob and Ahmar (2004a, 2004b), Baumgardner (1993), and Rahman (1990) provide detailed analyses of these influences, showcasing the dynamic interaction between local linguistic systems and English.

SBE has twenty-four consonant phonemes, but Pakistani English has a greater number of consonants, i.e. thirty-eight approximately. The exact number of consonants of Pakistani English may not be identified at this stage, yet it can be concluded that it has more consonants than SBE.

		Labial	Dental	Retroflex	Palatal	Velar	Uvular	Glottal
Stop	Voiceless	p p ^h	t t ^h	ʈ ʈ ^h		k k ^h		ʔ
	Voiced	b b ^h	d d ^h	ɖ ɖ ^h		g g ^h		
Affricate	Voiceless				tʃ tʃ ^h			
	Voiced				dʒ dʒ ^h			
Fricative	Voiceless	f	s		ʃ	x		h
	Voiced		z		ʒ	ɣ		
Nasal		m	n	ɳ	ɲ			
Liquid			l r	ɽ ɽ ^h				
Glide		v			j			

FIGURE 1. Consonants of Pakistani English
 (The study is based on observatory analysis, and the list of consonants may not represent the whole spectrum of consonants in Pakistani English)

In terms of vowel usage, Pakistani speakers do not differentiate between the low-back vowel [ɒ] and the mid-back vowel [ɔ:], merging them into a single phoneme, e.g. the vowels in *bought* /bɔ:t/ and *hot* /hɒt/ are same for Pakistani speakers. Similarly, the central vowels [ə] and [ɜ:] are absent in Pakistani English, often replaced by the low central vowel [ʌ], e.g. *pearl* /pɜ:rl/ and *above* /əbʌv/ are articulated as /pʌrl/ and /ʌbʌv/. While SBE features 12 monophthongs, Pakistani English has nine, showcasing a simplified vowel inventory.

Both varieties share four front vowels, but in the case of central vowels, Pakistani English has only one compared to three in SBE. Unique characteristics also appear in back vowels, where Pakistani English merges the low and the mid-back vowels, resulting in four distinct back vowels. These variations in vowel phonemes reflect the influence of local vernacular languages (Punjabi has one low-back vowel (Bhatia, 2008)), giving Pakistani English its distinctive identity.

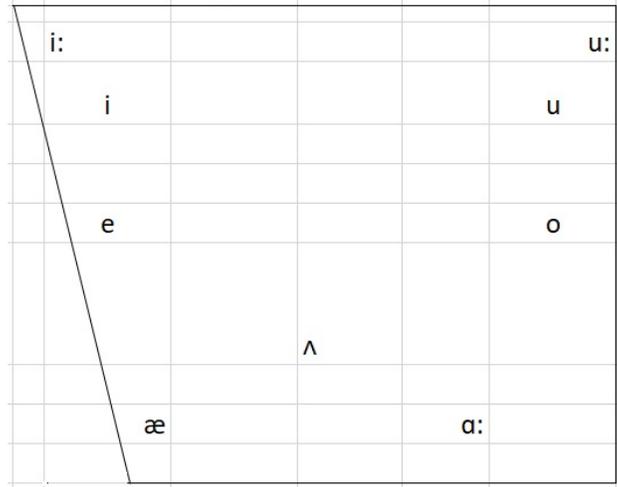


FIGURE 2. Monophthongs of Pakistani English

(The figure shows the monophthongs of Pakistani English. Acoustic studies on monophthongs, diphthongs, and triphthongs are ongoing, and the final number of vowel phonemes in Pakistani English has yet to be concluded)

There is also a phenomenon of monophthongisation of diphthongs. [ei] and [əʊ] are articulated as monophthongs. (The diphthong [ʊə] was also monophthongised but only by Pushto speakers of Pakistani English.) These two diphthongs are monophthongised, while the remaining six diphthongs of SBE are pronounced as diphthongs by Pakistani English. Pakistani English follows the other Asian English varieties in this particular aspect. Indian English (Gargesh, 2004; Nihalani et al., 2004; Trudgill & Hannah, 2008); Singapore English (Deterding, 2007; Wee, 2004); Malaysia English (Hickey, 2005); Nigerian English (Dyrenko & Fuchs, 2018), all show the same tendency.

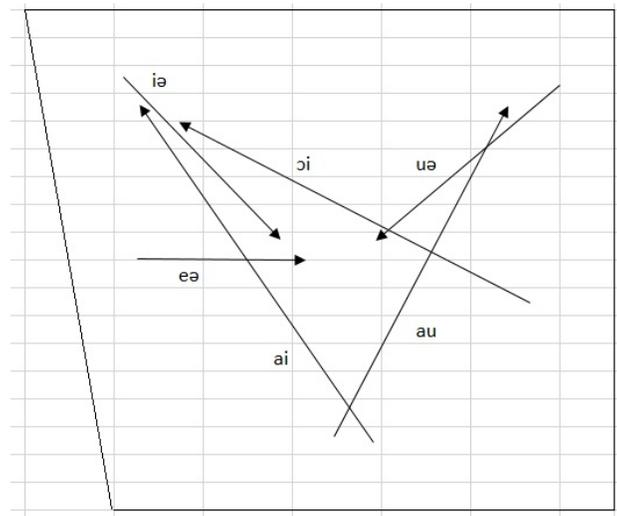


FIGURE 3. Diphthongs of Pakistani English

There are also triphthongs in Pakistani varieties of English. The word boy /boi/ is articulated as /boai/ in Pakistani English. Farooq and Mahmood (2018) have concluded that there are two triphthongs in Pakistani English, i.e. [ʊai] and [ʊəə].

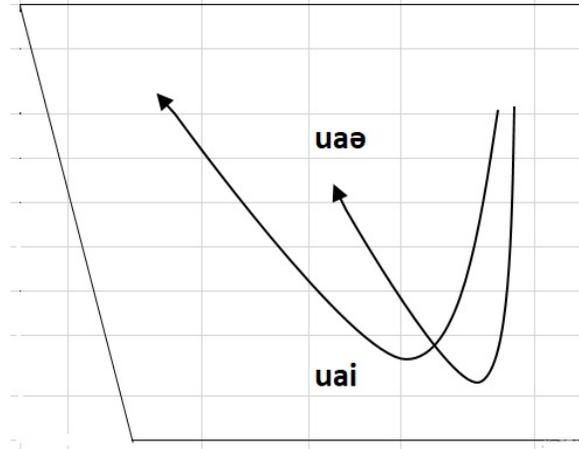


FIGURE 4. Triphthongs of Pakistani English

Overall, Pakistani English presents a unique phonetic landscape characterised by deviations from standard pronunciation norms. Despite these challenges, understanding the phonetic peculiarities of Pakistani English is crucial for effective communication and language teaching in diverse linguistic contexts.

DISCUSSION

In Pakistani English, phonetic peculiarities include the lack of differentiation between soft and hard [l], as well as the substitution of the sound [w] with the labio-dental approximant. Furthermore, syllabic sounds such as [l], [m], and [n] are often replaced by vowel-consonant groups, altering the pronunciation of words like 'concentrate'. Variations in the pronunciation of sounds such as [z] and [θ] further contribute to the distinct phonetic landscape of Pakistani English. Further, the consonants are more in number as compared to SBE, e.g. there are more aspirated sounds serving as independent phonemes, unlike SBE, which has only three aspirated sounds realised as allphones, e.g. /gh/, kh/, b^h/, d^h/ etc. In the same way, when it comes to vowel phonemes, as the results indicate, the number of vowels is different, whether it comes to pure vowels or diphthongs. The monophthongisation of a few diphthongs is another feature that has caused the variation in a number of vowel phonemes, leading to the variation in pronunciation. The results also show another distinguished feature of Pakistani English, i.e. triphthongs.

It can be affirmed that Pakistani English represents a unique form of English, distinguished by its differing number of phonemes. This characteristic aligns with the views of numerous linguists (Barber et al., 2009; Bauer, 2002; Gimson, 1989), who suggest that variations in phoneme counts signify distinct language varieties.

English serves as the de facto official language of Pakistan, playing a pivotal role in academia, media, and governance. Despite being less commonly used in everyday communication, it is understood by approximately 50% of the population (Talbot, 2023). Its dominance in official and academic domains reflects its importance in Pakistani society. However, efforts to standardise a Pakistani dialect of English have faced considerable challenges due to the country's linguistic diversity. Furthermore, sociopolitical campaigns against English reflect complex tensions between cultural preservation, national identity, and globalisation (Sarwar & Rashid, 2022).

English in Pakistan exemplifies the dynamic interplay between language, culture, and identity. Its phonological features, shaped by the influence of indigenous languages, and its sociolinguistic stratification, as detailed by Rahman (1990), highlight the complex and multifaceted role it plays in the country. Understanding these varieties and their unique characteristics contributes to a deeper appreciation of the linguistic diversity and evolving nature of English in a postcolonial context.

Pakistani English is a rich and dynamic variety of English, shaped by the complex interplay of native languages and socio-cultural factors. This literature review highlights the distinct segmental features of Pakistani English, the significant influence of native languages, and the regional and sociolectal variations within Pakistani English. Understanding these phonological characteristics is crucial for effective language teaching and further linguistic research, acknowledging the unique identity of Pakistani English while promoting intelligibility and communication in a global context.

PEDAGOGICAL IMPLICATIONS

The phonological characteristics of Pakistani English hold considerable pedagogical significance, offering a framework for refining English language teaching (ELT) practices in Pakistan. An apt understanding of phonetic features allows educators to balance linguistic identity with effective communication skills. Efforts to address pronunciation challenges should prioritise intelligibility over accent reduction, promoting respect for the local linguistic heritage while fostering global communication (Mahboob & Ahmar, 2004a).

Integrating the phonological traits of Pakistani English into English language curricula can make learning more accessible and relatable for students. By acknowledging regional linguistic influences, teachers can provide learners with authentic language models that reflect their everyday experiences. This approach not only validates students' linguistic backgrounds but also reduces the cognitive load associated with adopting unfamiliar phonetic norms (Baumgardner, 1993).

Further exploration of the phonetic variations in Pakistani English is essential for a deeper understanding of its complexities. Future research should examine regional, gender-based, and generational differences to capture a holistic picture of phonological diversity. Additionally, longitudinal studies investigating language change over time could shed light on the evolving nature of Pakistani English in response to globalisation and technological advancements.

By addressing these dimensions, educators and researchers can create an ELT framework that is both inclusive and effective, empowering learners to use English confidently while preserving their unique linguistic identities.

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