

Effects of Co-articulation on Pakistani English: A Case Study of Multilingual Speakers in Islamabad

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Abstract

The postmodern era is linguistically hybrid; therefore, the speakers of different languages all over the world show the characteristics of Assimilation, Elision and Dissimilation in their casual, everyday speech. Most of the time, the patterns of these features of connected speech are as per the rules of Received Pronunciation (RP) and occur in a certain context. However, these patterns of assimilation, elision and dissimilation are quite random in nature and at times take place due to L1 interference. Therefore, the study intends to unravel these patterns of assimilation, elision and dissimilation in the English of multilingual speakers whose native language is Punjabi employing Generative Phonology (Chomsky & Halle, 1968) as theoretical framework. For the said purpose, 24 Punjabi female university students have been selected to analyze the production of English words in their connected speech to investigate the effects of co-articulation. As the phonemic inventory, syllable template and the phonotactic constraints of Punjabi and English are different, it is assumed that the Pakistani English language users whose L1 is Punjabi apply the Punjabi phonotactic constraints on English which cause differences in co-articulatory process in their L2 production. Therefore, the paper aims at analyzing the impact of co-articulation on Pakistani English in connected speech of Punjabi speakers to explore how L1 (Punjabi) interference effects the phonological aspects and allows variation in Pakistani English (PE). The findings suggest that Punjabi speakers also make use of assimilation, elision, dissimilation to some or more extent while speaking English though the patterns may vary from person to person. Moreover, the significance of the study lies in the fact that it tends to endorse the claim that Pakistani English is a distinct and separate variety and the influence of native variety on English might be the main cause of this distinction.

Key words: Co-articulation, Pakistani English, Punjabi Speakers, Generative Phonology

Introduction

Pakistan lies to the North West of the Indian Sub-Continent. It has sixty-nine languages listed by the international agencies. However, major languages are not more than fifteen. English is one of these languages. The factors like hybridity, globalization and technology have added to the use and significance of English language in contemporary times. As a result, English has gained the status of global language and at present is widely acknowledged as a lingua franca across the globe. This rapid spread of English as lingua franca has resulted in emergence of many varieties and dialects all over the world. Similarly, in Pakistan, English has been localized and nativized, thus enjoys a high official status along with the national language Urdu. As English in Pakistan has gone through an evolutionary process over the last century, the stage of deviations, inter-language and deficient varieties are over, and Pakistani English (PE) has, now assumed its independent entity among other non-native varieties. Therefore, Pakistani people use it with their own patterns and do not follow the native norms, consequently, it has appeared as a distinct variety like Hong Kong English and Indian English et cetera.

The present study investigates the aspects of assimilation, elision and dissimilation in spoken English of Pakistani Punjabi native speakers. As the study is specific to the Pakistani variety of English, therefore, for this purpose, a sample comprising twenty-four female undergraduate/graduate students studying at Fatima Jinnah Women

University, Rawalpindi having Punjabi as their native language, were purposively selected to obtain speech samples based on a dialogue prepared by the researchers. The features of assimilation, elision and dissimilation including L1 interference employing Generative Phonology (Chomsky & Halle, 1968) as analytical framework for the study have been analyzed to identify or investigate how the above mentioned features are followed in spoken English of Pakistani Punjabi native female speakers.

The significance of the study lies in highlighting the communication similarities/differences between Pakistani English speakers and the native English speakers. The study may also be taken as a source to provide insights to the language teachers into the nature of phonological patterns that distinguish Pakistani English from the other varieties of English. This study may also be significant for ELT practitioners in the selection of appropriate teaching methods and strategies that accommodate and highlight the fine distinction of Pakistani English from the other varieties of English. The study may be considered important, as relatively less work has been conducted on the aspect of co-articulation in Pakistani English.

Problem Statement

These features of assimilation, elision and dissimilation are quite common in languages all over the world and most of the rules are shared by a lot of different languages. They all follow certain rules but they are also affected by particular phonotactic constraints of the native language. Although the phonological rules vary from language to language, and are thus somewhat arbitrary, it is nevertheless true that there are striking and simple regularities in what many phonological rules do. Therefore, the aim of the study is to investigate the patterns of assimilation, elision and dissimilation in spoken English of Punjabi speakers to analyze the influence of Punjabi language (L1) on English (L2) during connected speech. In addition, these phenomena may best be understood with the help of co-articulation that is simply referred as connected speech.

Research Question/s

The current research seeks to find an answer to the following research questions:

1. How does phonological variation take place in the connected speech of Punjabi speakers of Pakistani English (PE) with specific reference to assimilation, dissimilation and elision?
2. What is the role of their L1 (Punjabi) in effecting their L2 (English) in connected speech?

Literature Review

Punjabi is the most widely spoken language in Pakistan, being the native language of 44% of its population. Being the provincial language of Province Punjab, Punjabi is the most spoken language in Pakistan and eleventh most spoken language in India. Punjabi is considered as the ninth most widely spoken language in the world as according to the Ethnologue 2005 estimate, there are 130 million native speakers of the Punjabi language. The standard Punjabi variety lies is derived from Lahore, Sialkot, Gujranwala and Sheikhupura districts, written in the Shahmukhi script with the Urdu alphabet.

The assimilation, elision and dissimilation are most frequently occurring features of connected speech in almost all the languages of the world. However, all these phenomena are rule bound and language specific but they are also affected by particular phonotactic constraints of the native language of speakers when it is analyzed with particular reference to L2 use employing Generative Phonology (1968) as conceptual frame work.

Generative Phonology as being one of the significant theories of Phonological perspectives has highlighted the aspect of L1 influence on L2 by considering assimilation, elision, and dissimilation features of connected speech. Generative Phonology (1968) has its grounds in Generative Grammar by Chomsky and Halle (1968) basing its main notion on some finite set of rules resulting in infinite structures by operationalizing two levels; 1) Phonemic Representation also known as D-structure and 2) Phonetic Representation also known as S-Structure. According to this theory, perception and production go hand-in-hand to create meaningful utterance. The main philosophy is derived from Distinctive Feature Theory's (DFT) concept of feature that is abstract and binary in nature (Jakobson et al. 1941-1956). Major categories that Generative Phonology considers while carrying out a phonological analysis of sounds are assimilation, deletion, dissimilation, insertion and metathesis. Generative Phonology is concerned with two type of rules; 1) optional and 2) obligatory. Obligatory rules (i.e. nasalization and aspiration) as the name depicts, have to be followed as they are mandatory in all situations as far as standard rules of any language particularly English language is concerned. However, optional rules (i.e. assimilation, elision, dissimilation,

insertion and metathesis) may vary under the influence of L1 on L2. It is these optional rules, which are known as major categories in Generative Phonology in order to figure out differences at the level of analysis in connected speech.

Therefore, all these major categories are not isolatory phenomena rather part and parcel of connected speech and also known as co-articulation effects. Co-articulation can simply be defined as the articulation of two or more speech sounds together, so that one influences the other. It is the process of co-articulation where the aspects of assimilation, dissimilation and deletion occur as its divisions. For instance, in the process of connected speech pronunciations, the nearing/surrounding sound would get influenced having similarity, reduction, deletion or dissimilarity (Nathan, 2008; Roach, 2001). Less effort is needed at articulatory level to pronounce similar sounds together while more effort is required for the pronunciation of dissimilar sounds because when the process of dissimilation works on the neighboring segment feature, it avoids a segment systematically (Zia, 2002).

According to Cho (2004), Co-articulation works actively on both vowels and consonant sounds, henceforth, according to Chen et. al. (2007) and Li (2008) the consonant to a vowel would also make this process active. Therefore, co-articulation may be viewed as a universal phenomenon circumventing the previous results in which co-articulation at specific degree or type cannot be found at huge level in any language (Farnetani, 1999). Moreover, the cross-language variation is very important in this phenomenon having the differences amongst the various degrees and patterns, significantly making it a pervasive process. According to Ohman (1966), the co-articulation patterns act differently in different languages and Beddor (1993) argues that among the all languages of the world, at the level of nasalization process, the process of co-articulation would occur frequently at extreme level. Henceforth, Ladefoged (2010) argues that refined as in English, nasalization and its degree would differ from language to language (as cited in Kluge *et al.*, 2009).

To gain ease in articulatory process, the speaker often makes sounds alike accidentally through distortion of distinctiveness, this is known as assimilation. In this process, the more similar segments in the surroundings would share their similar feature with each other. Raphael et al. (2007) argues that assimilation would cooperate fully or partially in the process and most of the languages share these rules prominently. Phonotactic constraints would work effectively in the language having to follow certain phonetic rules. Along with the phonetic rules, Li (2008) argues that the variations could also have significance at phonological level in any speech. Moreover, assimilation has two main features or kinds to be divided into; a) progressive assimilation, b) regressive assimilation, and these would base on the concept of one-another direction according to Brannan & Weiss (2007).

In progressive assimilation, a sound follows a sound, which is often very similar by observing the similarity of the following sound. For instance, the sound /n/ would be similar to the sound /m/ in 'Happen' in English language as follows, for instance, Dretzke (2008) exemplifies it as; /hæpn/-to-/hæpm/. On contrary, in the process of regressive assimilation, a preceding sound throw its influence on the following sound, as a result, the original sound changes into a new sound, Collins and Mees (2003) exemplifies it as; /waɪt pepə/-to-/waɪp pepə/.

Further, the manner, voicing or place would also play a significant role in assimilation process. For instance, according to Roach (2001), the assimilation could be divided into; assimilation of manner, assimilation of voice and assimilation of place. For instance, in manner assimilation, Kluge *et al.*, (2009) clarifies that the preceding vowels would assimilate with the following nasal or /+nasal/ consonant. The voicing assimilation would be seen action in different languages normally. For instance, in English, often the /+voice/ consonants become voiceless when the following consonant proceeds the voiceless consonant, for instance, Zia (2002) exemplifies it as; /læpd/-to-/læpt/ (Zia, 2002).

Moreover, in co-articulation, the process of elision or deletion refers to the omission of one or more sounds (such as a vowel, a consonant, or a whole syllable) in a word or phrase. Often, sounds are deliberately elided to make a word easier to pronounce. However, in English language, elisions come naturally as spoken by native speakers and are often described as "slurred" or "muted" sounds. However, not all elided words are contractions and not all contractions are elided words (for example, 'going to' → 'gonna': an elision that is not a contraction; 'can not' → 'cannot': a contraction that is not an elision). Elision takes place at the following three positions, a) initial position: deletion involves silent letters (honest) and contracted forms (I'm) et cetera, b) middle position: deletion includes the elision of sounds in the middle of a word (friendship into frienship). It also deals with /r/ sound elision a concept of rhoticity, however, c) the final position deletion removes the final sound at the end of a word (car into /ca/, must into /mus/ et cetera.

While talking about L1 influence on L2, Best & Tyler (2007) argues that the perception of people is often worked through L1 into L2 perceiving the segments of sounds from L1 into L2. They would amalgamate the L1 sounds into L2 consciously or unconsciously (Flege, 1995). Flege (1995) argues that L2 consonants and vowels are often perceived differently from the native speaker by the non-native speakers of any language (p. 237). The production of sound into both languages L1 and L2 often differs, therefore, perceived differences exist at significant level in second language sound system (Flege, 1995). For instance, nasal consonants which are word-final in English could be identified similar by Brazilian learners i.e. /m/ and /n/ (Kluge et al., 2007; Kluge, 2010). Moreover, nasal perceptions in English are being categorized differently into the Korean and Japanese language speaker (Aoyama, 2003).

Due to the process of nativization, numerous new varieties and dialects of English have emerged (Boltan, 2004). Kachru (1982) termed the international utilizations of English as *World Englishes*. Native and non-native distinctiveness is also explained by Kachru (1982) through the three circles; inner, outer and expanding in diverse cultural contexts (Jenkins, 2003, P. 18). For instance, Mohammad (2010) argues that the distributions of these circles distinct them from each other at the level of geographical distribution. For instance, the native countries i.e. New Zealand, Canada, Australia, USA and UK represent the inner circle. On the other hand, Pakistan, India, Malaysia, Singapore project the outer circle as they play a significant role in promoting English as a second language in multilingual settings by making it a compulsory subject / language from the Kindergarten to Bachelors (Jenkins, 2003). Hence, Japan, China, Indonesia, Egypt or Israel would occur into the expanding circle where English is perceived and utilized as an international language.

In Pakistan, there are 17-18 million people who speak English as a second language that makes it the third largest English speaking country of Asia (Boltan, 2008). Pakistani English has distinctive features at phonological, grammatical, syntactic and lexical level (Mahboob and Ahmar, 2004). At the level of phonology, Raza (2008) claims that speakers of English in Pakistan often utilize the phonological and phonetical features of their mother tongue into English speech production, thus explores some distinctive features, i.e. rhoticity and epenthesis. For instance, various Pakistani linguists consider Pakistani English as a rhotic variety. Mehboob (2004) argues that Pakistani speakers often pronounce that rhotic /r/, which is a sociolinguistic factor (Rahman, 1990) which would not been seen into acrolectal variety of Pakistani English. Therefore, rhotic factor would present into mesolectal and basilectal varieties. Moreover, Retroflexion of /t/ and /d/, RP alveolar are often replaced with retroflex stops (i.e. “dress” /dres/ and “strut” /ɪstrʌt/), having /d/ and /t/ retroflexion (Mahboob, 2004). On the other hand, in Pakistani English, dentalization of /t/ and /d/ is common. For instance, RP dental fricatives are often replaced with dental stops i.e. ‘then’ /den/ and “north” /nɔ:rt/ (Mahboob, 2004) as a phenomenon which is prominent and significant feature of Englishes in South Asia (Kachru, 1992). Additionally, the sounds /v/ and /w/ are utilized as allophones due to the indigenous languages (Mahboob, 2004) i.e. the Pashto sounds /v/ or /w/ are often not distinctive (Rehman, 1990) as a feature of Englishes in South Asia (Kachru, 1992).

Furthermore, in Pakistani English there is only one /l/ sound exists instead of the clear /l/ and dark /l/ i.e. in “lot” /lɔ:t/ and “goal” /go:l/, the sound of /l/ will be pronounced in the same manner (Mahboob, 2004). Hence, it is also conferred as a distinctive feature in Englishes of South Asia (Kachru, 1992) along with epenthetic vowel /ə/ insertion, which specifically is inserted, by the Punjabi speakers who speak English (Mahboob, 2004) and would be the prominent aim looking at vowel nasalization phenomenon in Pakistani English and Punjabi languages.

Research Methodology

The research is qualitative in nature employing Generative Phonology as its conceptual framework to analyze the phonological variation found in spoken English of under/graduate female students with Punjabi as their native language. However, quantification of data is done to validate the findings resulted from qualitative analysis in order to add more validity and reliability to research findings. The following categories employed from Generative Phonology (Chomsky & Halle, 1968) have been operationalized as analytical devices for the purpose of analysis:

1. Assimilation
2. Elision
3. Dissimilation
4. L1 influence on L2; Insertion, accent and pronunciation

Sampling

As mentioned earlier, a sample comprising twenty four female students of Bachelors and Masters English (twelve each) between the ages of eighteen to twenty five, studying at Fatima Jinnah Women University, Rawalpindi having Punjabi as their Mother Tongue, is selected. The present study deals with the spoken English of young Punjabi females whose education is in process with at least Higher Secondary School education in common. The study has incorporated purposive sampling to choose students with Punjabi as their native language to analyze the influence of their L1 on their L2 (English).

Data Collection Instruments

An English dialogue (based on words tend to assimilate and delete in RP) was given to the participants to analyze the aspects of assimilation, elision and L1 interference in the spoken English of Pakistani Punjabi native speakers. The variables included age, gender, medium of education and mother tongue have been considered. The data was recorded and analyzed keeping in view the objectives of the research.

Procedure of Data Collection

In order to analyze the phenomenon of co-articulation in spoken English of Pakistani Punjabi native speakers, the researcher has designed a dialogue to be performed in pairs. For the said reason, the purposively selected twenty-four students of Bachelors and Master in English are divided in twelve pairs respectively. Every pair was given the same dialogue to perform which was recorded using smart phone.

Analysis and Discussion

Recordings of English spoken by the sample population are made using a dialogue with special emphasis on words that tend to assimilate and to be deleted in connected speech. The sounds produced by more than fifty percent of the sample would be treated as representing the speech of Punjabi Pakistani speakers’ English. The pronunciation of respondents have depicted varied patterns of assimilation, deletion, elision and also reflected aspects of L1 influence (Punjabi) on English language. As there were total twelve pairs (twenty-four students of Bachelors /Master in English with Punjabi as their L1) who participated willingly as source for data collection, therefore, analysis is conducted accordingly (pair wise) keeping in view the following aspects of Generative phonology:

1. Aspect of Assimilation

During analysis, it is found that assimilation is a commonly occurring aspect in the spoken English of Punjabi Pakistani speakers as all the respondents assimilated words during the dialogue to some or more extent. However, it has been observed that diverse patterns of assimilation took place during their conversation. The following is the tabular analysis of assimilation that took place in the speech of Punjabi speakers while performing dialogue in English:

Table 1: (Analysis of Bachelor of English Punjabi Native Speakers Recordings)

Pairs of BS English Punjabi Speakers	Sounds Assimilated	Type of Assimilation	Total/partial Assimilation
Pair-1	Bad English as Bat English	Progressive	Partial
	Proud parents as Proup parents	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Thought provoking as thoup provoking	Regressive	Total
	Job ventures as Jov ventures	Regressive	Total
Pair-2	Job prospects as Jop prospects	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Proud parents as proup parents	Regressive	Total
	Thought provoking as thoup provoking	Regressive	Total
	Can make as cam make	Regressive	Total
	Good speaking skill as goot		

	speaking skill	Progressive	Partial
Pair-3	Good girl as gug girl	Regressive	Total
	Proud parents as prou parents	Regressive	Total
	Thought provoking as thou provoking	Regressive	Total
	Can make as cam make	Regressive	Total
	Added bonus as addet bonus	Regressive	Partial
	Good friend as gub friend	Progressive	Partial
	Now that my as now thath my	Progressive	Partial
Pair-4	Should be as shoub be	Regressive	Total
	Added bonus as addet bonus	Progressive	Partial
	Job prospects as Jop prospects	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Proud parents as prou parents	Regressive	Total
	Thought provoking as thou provoking	Regressive	Total
Pair-5	Job prospects as Jop prospects	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Proud parents as prou parents	Regressive	Total
	Thought provoking as thou provoking	Regressive	Total
	Should be as shoub be	Regressive	Total
Pair-6	Bad English as Bat English	Regressive	Total
	Proud parents as Prou parents	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Thought provoking as thou provoking	Regressive	Total
	Job ventures as Jow ventures	Regressive	Total
	Not be available as nob be available	Regressive	Total

Table 2: (Analysis of Master English Punjabi Native Speakers Recordings)

Pairs of Ma English Punjabi Speakers	Sounds Assimilated	Type of Assimilation	Total/partial Assimilation
Pair-1	Should be as shoub be	Regressive	Total
	Good girl as gug girl	Regressive	Total
Pair-2	Good speaking as gug speaking	Progressive	Total
	Prod parents as prou parents	Regressive	Total
	Should be a shoub be	Regressive	Total

Pair-3	Good girl as gug girl	Regressive	Total
Pair-4	Thought provoking as Thoup provoking	Regressive	Total
	Should be as shoub be	Regressive	Total
	Job prospects as Jop prospects	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Proud parents as proup parents	Regressive Regressive	Total Total
Pair-5	Thought provoking as Thoup provoking	Regressive	Total
	Should be as shoub be	Regressive	Total
	Job prospects as Jop prospects	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Proud parents as proup parents	Regressive Regressive	Total Total
	I am good as Im goog	Progressive	Total
Pair-6	Thought provoking as Thoup provoking	Regressive	Total
	Good girl as gug girl	Regressive	Total
	Job ventures as jow ventures	Regressive	Total
	In life as il life	Regressive	Total

From the above mentioned tables, it is clear that assimilation is the most commonly occurring feature of co-articulation in English language. Moreover, the tabular analysis also depicts that Regressive assimilation is more frequent as it has taken place for **50** times where as Progressive assimilation has taken place only for **07**times both in the conversation of BS /MA English Punjabi speakers. Similarly, the phenomenon of total assimilation as compared to partial assimilation is more common as the difference is **51 vs. 06** respectively.

2. **Aspect of Dissimilation**

As far as the aspect of Disimilation is concerned, it can be analyzed with the aspect of assimilation in form of the dis- familiarity of two sounds. Therefore, if we analyze the (Table-1 & 2) displaying the assimilation analysis Master and Bachelor English Students whose mother tongue is Punjabi, it is observed that dissimilation has not taken place frequently in the spoken English of Punjabi nativespeakers of Pakistan. As per the analysis there were only two expressions i.e. *'bad English as bat English'*, *'added bonus as addet bonus'* and *'now that my as now thath my'* which have depicted the aspect of dissimilation (dis-familiarity of two sounds) to some extent.

3. **Aspect of Elision**

Elision means deleting a sound unconsciously for the sake of adding fluency in speech is one of the most commonly occurring phenomenon of co-articulation. The same has been observed during the analysis of recorded conversations of the participants which has been reflected with the help of the table below:

Table 3: (Analysis of Bachelor English Punjabi Native Speakers Recordings)

Pairs of BS English Punjabi Speakers	Examples of Elision from Analysis	Sounds Deleted	Position of Elision
	Fluent speaker as fluen speaker	/t/	Final

<p>Pair-1</p>	<p>How about you as how about you speaking skills as speakin skills I am as M I think as I thin You could perhaps as you could perhaps I don't want my as I don wan my We must do as we mus do She and I as She n i</p>	<p>/t/ /g/ /M/ /k/ /d/ /t/ and /t/ /t/ /d/</p>	<p>Final Final Initial Final Final Final Final Final</p>
<p>Pair-2</p>	<p>Fluent speaker as fluen speaker I can devote as I ca devote I am as M I donot want as I donwan We must do as we mus do She and I as She n i Donot forget as dn forget Perhaps as peraps</p>	<p>/t/ /n/ /i/ /t/ and /t/ /t/ /d/ /t/ /h/</p>	<p>Final Final Initial Final Final Final Final Middle</p>
<p>Pair-3</p>	<p>My bad English as my ba English She and I as She n i Birthday as birday I am not a fluent speaker as m no a flen speaker Parents a parens</p>	<p>/d/ /d/ /th/ /t/ and /t/ /t/</p>	<p>Final Final Middle Final Final</p>
<p>Pair-4</p>	<p>I am good too as M goo too She and I as she n i I am afraid as M afrai Good friend as gu friend Speaking skill as speakin skill</p>	<p>/i/ and /d/ /d/ /i/ and /d/ /d/ /g/</p>	<p>Initial & Final Final Initial & Final Final Final</p>
<p>Pair-5</p>	<p>Different places as differn places Helpful as hepful We must as we mus Speaking as speakin That will as tha will What do you as wha do you We must as we mus How are you dear as how are you ear She and I as she n I I am afraid as M afrai that Find someone as fine Parents as parens Birthday as birday</p>	<p>/t/ /l/ /t/ /g/ /t/ /t/ /t/ /d/ /d/ /d/ /i/ and /d/ /d/ /t/ /th/</p>	<p>Final Middle Final Final Final Final Final Final Final Final & Final Final Final Final Middle</p>

Pair-6	But I can make as bu I ca make	/t/ and /n/	Final
	Parents as parens	/t/	Final
	Think as thin	/k/	Final
	I don't as I dun	/t/	Final
	She and I as she n i	/d/	Final
	I wanted as I wan my	/t/ and /d/	Final
	You could as cou	/l/ and /d/	Middle & Final
	Birthday as birday	/th/	Middle
	Donot forget to as dun forge to	/t/ and /t/	Final
That will as tha will	/t/	Final	

Table 4: (Analysis of Master English Punjabi Native Speakers Recordings)

Pairs of MA English Punjabi Speakers	Examples of Elision from Analysis	Deleted Sounds	Position of Deletion
Pair-1	I am good as M goo I am as M I think as I thin	/i/ and /d/ /i/ /k/	Initial & Final Initial Final
Pair-2	Fluent speaker as fluen speaker I am as M I donot want as I don wan World as word Find as fine	/t/ /i/ /t/ /l/ /d/	Final Initial Final Middle Final
Pair-3	Good as goo She and I as She n i speaking as speakin find as fine must as mus donot as dun I am not a fluent as M not a fluen You could as you cou Afraid as afraid	/d/ /d/ /n/ /d/ /t/ /t/ /t/ /l/ &/d/ /d/	Final Final Final Final Final Final Initial & Final Middle & Final Final
Pair-4	I am not a fluent as M not a fluen You could as you cou Afraid as afraid Good friend as gu friend	/e/ &/ t/ /d/ /d/ /g/	Initial & Final Final Final Final
Pair-5	What do you as wha do you We must as we mus Do not as dun Speaking course as speakin course Fluent speaker as fleun speaker World as word	/t/ /t/ /t/ /n/ /t/ /l/	Final Final Final Final Final Middle

Pair-6	I don't as I dun	/t/	Final
	She and I as she n i	/d/	Final
	She might not as she migh	/t/	
	not	/t/	Final
	Must as mus	/d/	Final
	I am good as M goo	/g/	Final
	Learning as learnin		Final

The aforementioned tables (3 and 4) reflecting the feature of elision, depict that elision is also one of the most occurring features of English connected speech. The data depicts that elision in the speech of Punjabi speakers have taken place at all three positions i.e. initial, middle and final. However, deletion at final position seems to be more frequent as compared to other positions as shown in the table above. Furthermore, it can be said that elision of sounds /t/ and /d/ is more frequent as compared to other sounds both in the spoken English of the participants. The main sounds, which are deleted long with their ratio of elision is shown in the table below:

Table 5: Ratio of Sounds Elision

Sounds Deleted	Total number the sound deleted in the conversation
/t/	39 time
/d/	26 times
/n/ and /g/	5 times each
/l/	04 times
/k/ and /th/	3 times each

4. L1 Interference

During analysis, the interference of L1 (Punjabi) on L2 (English) is found. It is observed mainly in the recorded conversation of Masters English students performing the given dialogue for the purpose of data collection. The L1 interference is reflected mostly at the level of pronunciation as the words like **not, venture, prospects, parents, want, okay, join** et cetera have been mispronounced as *noth, ventureay, prospectus, paaarents, went, okaaaeey, jaain* et cetera. Their pronunciation may be described as stressed and clear as they were performing the dialogue while reading it very carefully. Moreover, one of the participants has used Punjabi word '**khair**', quite unconsciously instead of '**well**' and the addition gap filler '**mmm , na**' was also found in the conversation of one pair of MA students.

Furthermore, most of the students of MA English initially started with a general non-native accent but later on as they got comfortable they tried to change their accent to make it more like natives. During this process of shifting from non-native to more/less native-like accent, one participant pronounced restaurant as *restaurantey*.

Findings

The following are the findings of the research:

1. The features of co-articulation (Assimilation, Elision, and dissimilation) are common in English speech of Punjabi native speakers who are still in the process of gaining education. However, these features are found more frequent in the conversation of Bachelors of English students as compared to MA English students with Punjabi as their L1.
2. Regressive and Total assimilation are more common as compared to Progressive and Partial assimilation in the spoken English of Pakistani Punjabi speakers.
3. Elision of /t/ and /d/ sounds is a frequently occurring feature in spoken English of Pakistani Punjabi speakers. Moreover, elision has taken place at all three places i.e. initial, middle or final positions.
4. The results depict a degree of L1 (Punjabi) interference upon L2 (English) as Punjabi speakers experience variation not only at the level of phonological features in connected speech but also at the level of accent.
5. An overlapping has been found between assimilation and elision as, at certain times, the researcher was unable to analyze that which process has influenced a particular sound.

6. Moreover, it has been observed that all the Punjabi speakers in the study pronounced /v/ sound as /w/ as it's a part of Pakistani Punjabi variety of English that Punjabi speakers could not differentiate between the production of /v/ and /w/ (Mahboob, 2004).
7. Pakistani English is a distinct variety of English language, therefore, it should be analyzed with the same spirit rather than comparing it with Standard English.

Conclusion

English is essential for the existence of many Pakistani students coming from diverse linguistic backgrounds in Pakistan, as it is the passport for advancement, official/ academic language and assumes ever-greater significance because of the effects of globalization. However, the vast majority of Pakistani students struggle with it and provide varied structures of pronunciation on the basis of optional rules mainly (Halle and Chomsky, 1968) as it is not their mother tongue and it does not matter that a great many of them do not begin studying it until after they have completed their primary education. For future research, the same phenomenon can be studied from the perspective of other regional varieties by doing a comparative analysis as Pakistan is a language rich country having more than 72 languages running parallel.

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Appendix

A Dialogue between Two Class fellows/Friends

Alice: Hey Stella , how are you dear?

Stella: I am good. How about you, Alice?

Alice: I am good too. Thanks

Alice: Can you speak English?

Stella: I'm not a fluent speaker, but I can make myself understood.

Alice: Well, actually, we needed someone with good speaking skills in English. Do you think you can improve your English in two or three months? You could perhaps consider joining an English-speaking course.

Stella: This idea of yours to join a class to improve English is really thought provoking. I have always wanted to improve my English, but I never really got an opportunity. Now that my studies are over, I think I can devote more time to learning English.

Alice: Great. Two or three hours a day should be more than enough.

Stella: Yeah. I am planning to join an English-speaking course today. I don't want my bad English to affect my job prospects. Rather I want my improved English should be like an added bonus for my future job ventures.

Alice: You're right. English is the language of communication all over the world. If you speak it, you can visit different places. And as it will add to our success in life that will make our parents, 'proud parents'.

Stella: What do you think about Marry, will she be helpful to us in our free time?

Alice: Hmm. She is a good girl and she and I are good friends too. However, I am afraid that she might not be available as she does a job in a restaurant in the evening.

Stella: ok then we will find someone else to help us in improving our English.

Alice: yeah. We must do something about it. Well, I have to go. You please do not forget to bring balloons for Sally's birthday celebrations.

Stella: ok. See you in the evening. Bye

Alice: bye