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A Comparative Study of Nepali and English Phonology: Implications for Second Language Acquisition

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Abstract

This comparative study of the phonological systems of the Nepali and English languages uncovers the similarities and dissimilarities between the phonological systems of the Nepali and English languages and their implications for learning English by Nepali learners. Despite sharing Indo-European ancestry, Nepali (Indo-Iranian) and English (Germanic) stand significantly distant in phonology on different aspects: the segmental features of consonants, vowels, and consonant clusters; and suprasegmental features such as length, stress, intonation, pitch, tempo, juncture, and rhythm. Following Lado's (1957) Contrastive Analysis Hypothesis, Selinker's (1972) Interlanguage Theory, and Jarvis and Pavlenko's (2008) Cross-linguistic Influence, the analysis unearthed some of the major difficulties caused by interlinguistic disparities that affect intelligibility and fluency. In this context, an action-oriented pedagogical intervention is required since English has been considered an academic and socio-economic advancement of the students in a multilingual context of education in Nepal. Such interventions include phonetic drills, prosodic training, and pedagogical materials for effectively teaching English phonology.

Keyword: *Nepali and English Phonology, Implications, Second Language Acquisition, English language uncovers, and Germanic language serving*.

Introduction

The study of the English language has gained significant importance due to globalization, migration, and the development of multilingual education systems (Paneru et al., 2024) The linguistic interplay between Nepali and English is an intriguing area of language study, providing a rich tapestry for investigation, as these languages are among the most divergent yet cognate within the Indo-European family. While English is primarily a Germanic language serving as an international lingua franca and borrowing from numerous languages, Nepali, in contrast, is a late Indo-Aryan evolution influenced by neighboring Tibeto-Burman languages. Consequently, the two languages and cultures differ in nearly all phonological, morphological, syntactic, and semantic aspects, with each component posing challenges for the instruction of English to Nepali learners, for whom English serves as a means of educational attainment, professional advancement, and social acceptance within the country's globally interconnected landscape (Puri, 2021).

In the context of Nepal, English is not merely an academic subject; it is the foundation of the entire educational cycle, from primary school to university. It also represents the language capital necessary for accessing immense global resources, international exposure, and navigating Nepal's multilingual setting, where over 120 languages are actively spoken (Paneru et al., 2024; Bohara, 2025). Often, English acts as a gateway to admission to some of the world's top institutions or as a means to enter the urban job market that many Nepalese aspire to. However, despite significant time and resources dedicated to its instruction, many learners in Nepal do not achieve fluency, even when they may reach some level of accuracy. The English language faces notable challenges, especially in pronunciation, which has severely impacted learners (Joshi et al., 2023). Phonological barriers in both languages top the hurdles in producing and understanding spoken English, leading to breakdowns in communication, which is often reported negatively in both academic and wider contexts.

In Nepal’s EFL settings, effective pronunciation instruction demands a nuanced understanding of linguistic, cultural, and pedagogical factors to address the complexities of teaching English as a global lingua franca (Paudel, 2024). Yet, modern English

textbooks and teaching methods in Nepal provide limited support for Nepali-speaking learners grappling with pronunciation challenges. Many enthusiastic teachers, lacking formal training in phonetics and phonology, focus primarily on grammar translation, emphasizing written skills with little attention to speaking. Research in this area is limited and primarily concentrates on the phonological interface between Nepali and English. There has been minimal exploration of how these sound systems interact and influence SLA. However, the phonological dimension, including the articulation of individual sounds and prosodic patterns in speech, is crucial for shaping spoken competence yet is often overlooked. Pronunciation, fundamental for intelligibility, fluency, and accurate conveyance of meaning, serves as a significant tool that facilitates access to other language skills.

Phonology affects learners in both subtle and significant ways; individual segments include consonants, vowels, and clusters, along with articulation and phonotactic rules. For instance, English employs labiodental fricative sounds (/f/, /v/) and interdental fricatives (/θ/, /ð/), while Nepali incorporates retroflex consonants (/ʈ/, /ɖ/) and aspirated stops (/p^h/, /$b^ɦ$/). These features exist within the phonemic systems of both languages, with Nepali including six monophthongs. Additionally, aspects such as vision, meaning, intonation, pitch, tenseness, and rhythm distinctly differentiate these languages. Similarly, the complex vowel system of English consists of 12 monophthongs and eight diphthongs. In comparison, Nepali has only six monophthongs and 10 diphthongs, creating pronunciation challenges for students accustomed to a simpler system (Joshi et al., 2023). Beyond individual sounds, suprasegmental features also distinguish the languages, including length, stress, intonation, pitch, tempo, juncture, and rhythm. Such periodic divergences have also created pronunciation difficulties, even among native Nepali speakers.

The study aims to address the gap in research by conducting a methodological comparison of the phonological systems of Nepali and English to identify specific challenges for Nepali learners acquiring English as a second language. The work engages with three major theories: Mercade's theory; Lado's (1957) Contrastive Analysis Hypothesis, which suggests that interference arises when the structures of L1 and L2 differ; Selinker's (1972) Interlanguage Theory; and Jarvis and Pavlenko's (2008) Cross-

Linguistic Influence, which seeks to intervene in the transfer of L1 phonological features that can influence L2 production. The ultimate goal of the study is to systematically contrast segmental phenomena (consonants, vowels, consonant clusters) alongside some suprasegmental properties (length, stress, intonation, pitch, tempo, juncture, rhythm), thereby analyzing the phonological disabilities faced by Nepali learners and providing practical recommendations for teaching English in Nepal, specifically within multilingual classrooms.

In Nepal, English opens avenues for educational scholarships, international job placements, and social mobility, making phonological mastery essential for these opportunities (Bohara, 2025). Pronunciation challenges not only hinder communication but also instill insecurity in learners who may feel inadequate in the very language for which they face criticism. While addressing challenges within SLA theory, this study outlines pedagogical frameworks for teachers to design engaging tasks: phonetic exercises, prosodic training, and contextual materials, all aimed at enhancing the English pronunciation of Nepali learners while connecting linguistic theory with practical interventions relevant to the current state of Nepalese education. This ensures that all phenomena are discussed in relation to how understanding phonological contrasts can shape identity and SLA, thus offering perspectives valuable for both theoretical and practical applications of discourse.

Methodology

This study conducts a comparison of Nepali and English to identify pronunciation challenges for Nepali learners of English, guided by Lado's (1957) Contrastive Analysis Hypothesis, Selinker's (1972) Interlanguage Theory, and Jarvis and Pavlenko's (2008) Cross-Linguistic Influence. It relies exclusively on secondary sources, including Acharya (1991) for Nepali phonology and Roach (2009) and Gussenhoven and Jacobs (2017) for English phonology, without introducing new data.

Segmental Analysis

Consonants: Compared by voicing (voiced vs. voiceless), place of articulation (e.g., bilabial, alveolar, retroflex), and manner (e.g., plosive, fricative, nasal), noting phonemic and allophonic distinctions (e.g., Nepali aspirated /p^h/ vs. English allophonic [p^h]).

Vowels: Analyzed by tongue position (front, central, back), height (high, mid, low), length (phonemic in Nepali, contextual in English), and diphthong behavior, using International Phonetic Alphabet (IPA) transcriptions for accuracy (e.g., Nepali /pʰal/ vs. English /pæl/).

Consonant Clusters: Examined for phonotactic constraints, contrasting Nepali's simpler CV syllable structures with English's complex CCCVC sequences (e.g., /str-/ in "strength" vs. /tr-/ in Nepali त्रिकोण /trikoɳ/).

Suprasegmental Analysis

Length: Contrasts phonemic vowel length in Nepali (e.g., /ka/ vs. /kaː/) with contextual length in English (e.g., [bæːd] vs. [bæt]).

Stress: Compares English's stress-timed rhythm and phonemic stress (e.g., /ˈrɛkərd/ vs. /rɪˈkɔːrd/) with Nepali's syllable-timed, non-phonemic stress (e.g., /sʌˈpʌnā/ vs. /ˈsʌpʌnā/).

Intonation, Pitch, Tempo, Juncture, Rhythm: Analyzes functional differences, contrasting English's emotive pitch (e.g., /ˈhæpi↑/ for joy) and connected speech (e.g., [ˈgɪmi] for "give me") with Nepali's politeness-driven pitch (e.g., /tʌˈpaːiː/) and clear syllable boundaries (e.g., /tiˈmiː ˈaːuˈdai/).

Findings are systematically interpreted through the three SLA theories to identify phonological barriers (e.g., L1 substitutions like /pʰ/ for /f/, stress misplacement) and propose targeted pedagogical strategies, such as phonetic drills for unfamiliar sounds (e.g., /f/, /θ/), vowel distinction exercises (e.g., /ɪ/ vs. /iː/), and prosodic training for stress and intonation, tailored to Nepal's multilingual EFL context. Tables and IPA examples from secondary sources illustrate contrasts, ensuring a structured comparison without visual aids like vowel trapeziums.

Results and Discussion

This section is presented under various sub/subheadings that reflect key phonological aspects of the English and Nepali languages. It has presented the results and discussed them under the segmental and suprasegmental phonology. In segmental phonology, the study has made a comparative analysis between English and Nepali sound systems, especially focusing on consonants, vowels, and consonant clusters. Similarly, it

has made a condensed comparison of suprasegmental features such as length, stress, intonation, tempo, juncture, and rhythm between the English and the Nepali languages. Finally, it discusses the challenges and implications for teaching, highlighting substitutions, mispronunciations, and pedagogical strategies to address phonological differences.

Segmental Phonology: Vowels, Consonants, and Consonant Clusters

Segmental Phonology, by its name and nature, focuses on the individual sound segments of a language, such as consonants, vowels, and their combinations.

Consonants in Nepali and English

The consonants of any language's phonological system are distinguished by voicing, place of articulation, and manner of articulation. Both Nepali and English sounds rely on pulmonic egressive airstream mechanisms to produce consonants with lung air; however, the inventories of the two languages differ greatly, and this presents different challenges for Nepali learners of English.

Voicing

Voicing distinguishes those consonants that are produced with vibrations of the vocal cords (voiced) from those that are not (voiceless). Both languages have voiced consonants: stops /b/ ("bat" or Nepali बाटो /baṭo/, road), /d/ ("dog" or डर (dar, fear)), /g/ ("go" or गाउँ /gāũ/, village), and nasals /m/ ("man" or माया /māyā/, love), /n/ ("net" or नाक /nāk/, nose), /ŋ/ ("sing" or सङ्ग /saṅga/, with). Approximants /w/ ("wet" or वन /wan/, forest) and /j/ ("yes" or यहाँ /yahã̃/, here) are also common to both languages. In the consonantal inventory, English extends the voiced setting with fricatives voiced /v/ ("very"), /z/ ("zebra"), /ʒ/ ("measure"), and affricate /dʒ/ ("judge"), unheard of in standard Nepali. Voiced aspirated stops /bʱ/ (भारी /bhārī/, heavy)/dʱ/ (धन /dhan/, wealth)/gʱ/ (घर /ghar/, house) and /dʒʱ/ (झोला /jholā/, bag) distinguish themselves from the unaspirated ones mentioned above, which have no English counterparts since aspiration is allophonic (e.g., "pin" [pʰɪn] vs "spin" [spɪn]).

Voiceless stops /p/ ("pin" or पल /pal/, moment), /t/ ("top" or तारा /tārā, star), and /k/ ("cat" or कथा /kathā, story) are thus common to both languages, but English includes voiceless fricative /f/ ("fun"), /s/ ("sip"), /ʃ/ ("ship"), /θ/ ("think"), and affricate /tʃ/ ("church") while limiting voiceless fricatives to /s/ (सपना /sapanā/, dream), and /h/ (हात /hāt/, hand) in Nepali. That is, Nepali also has aspirated stops /pʰ/ (फल /phal/, fruit), /ʈʰ/ (थाल /thāl/, plate), /kʰ/ (खाना /khānā/, food), and /tʃʰ/ (छाला /chhālā/, skin). This pattern of absence of particular sounds leads to substitutions from the learner's first language, while pronouncing words with such sounds, such as "fin" [fɪn] as [pʰɪn], "ship" [ʃɪp] as [sɪp], and "thin" [θɪn] as [tɪn]. The voiced and voiceless speech sounds from the English language and the Nepali language can be presented as follows.

Table 1. *Voiced and Voiceless Sounds in English and Nepali*

Language	Voiced Sounds	Voiceless Sounds
English	/b/, /d/, /g/, /v/, /z/, /ʒ/, /dʒ/, /m/, /n/, /ŋ/, /l/, /r/, /w/, /j/; All vowels	/p/, /t/, /k/, /f/, /θ/, /s/, /ʃ/, /tʃ/, /h/
Nepali	ब /b/, द /ɖa/, ध /ɖʰa/, ग /g/, ड /ɖ/, भ /bʱ/, घ /gʱ/, ज/z/ झ /zʱ/, म /m/, न /n/, ङ /ŋ/, ल /l/, र /r/, व /w/; All vowels	प /p/, त /ʈ/, क /k/, ट /ʈ/, फ /pʰ/, थ /ʈʰ/, छ /tʃʰ/, स /s/, ख /kʰ/, ह /h/

Learners replace English /v/ with [bʱ] ("very" as [ˈbʱeri]), /z/ with /s/ ("zoo" as [zuː]), and overlook aspiration distinctions in English, reflecting Nepali's phonemic system.

Place of Articulation

Bilabials /p/, /b/, /m/ (e.g., "pat" or पति/ pati/, husband) are shared, but English adds labiodentals /f/, /v/ ("fan," "van"), absent in Nepali, which has aspirated /pʰ/, /bʱ/. Dental stops in Nepali—/ʈ/ (तल/ tal/, lake), /ɖ/ (दल /dal/, group), /ʈʰ/, /ɖʱ/—contrast with

English's interdental /θ/, /ð/ ("thin," "this"). Nepali's retroflex /ʈ/ (टोपी/ ṭopī, cap), /ɖ/ (डर/ ḍar, fear), /ʈʰ/, /ɖʱ/ lack English equivalents, while English's palato-alveolar /ʃ/, /ʒ/, /tʃ/, /dʒ/ are absent in Nepali. Alveolars /t/, /d/, /n/, /l/, velars /k/, /g/, /ŋ/, and glottal /h/ overlap, with Nepali adding aspirated /kʰ/, /gʱ/. The summary of the place of articulation in the English language, as well as the Nepali language, can be presented as follows.

Table 2. *Place of Articulation*

Place	Nepali Consonants	English Consonants
Bilabial	प /p/, ब /b/, म /m/, भ /bʱ/, व /w/	/p/, /b/, /m/, /w/
Labio-dental	-	/f/, /v/
Dental	त /t̪/, थ /t̪ʰ/, द /d̪/, ध /d̪ʱ/	/θ/, /ð/
Alveolar	न /n/, ल /l/, स /s/	/t/, /d/, /n/, /l/, /s/, /z/
Post-alveolar	श /ʃ/	/ʃ/, /ʒ/, /r/
Palato-alveolar	च /tʃ/, छ /tʃʰ/, ज /dʒ/, झ /dʒʱ/	/tʃ/, /dʒ/
Palatal	य /j/	/j/
Velar	क /k/, ख /kʰ/, ग /g/, घ /gʱ/, ङ /ŋ/	/k/, /g/, /ŋ/
Glottal	ह /h/	/h/
Retroflex	ट /ʈ/, ठ /ʈʰ/, ड /ɖ/, ढ /ɖʱ/, ण /ɳ/	-

Learners approximate /f/ with /pʰ/ ("fan" as [pʰæn]), /θ/ with /t̪/ ("think" as [t̪ɪŋk]), reflecting L1 constraints.

Manner of Articulation

Plosives /p/, /b/, /t/, /d/, /k/, /g/ are shared, with Nepali adding aspirated /pʰ/, /bʱ/, /tʰ/, /dʱ/, /kʰ/, /gʱ/. Nasals /m/, /n/, /ŋ/ overlap, but Nepali includes /ɳ/ (पर्ण/ parɳ, leaf). English fricatives /f/, /v/, /s/, /z/, /ʃ/, /ʒ/, /θ/, /ð/ outnumber Nepali's /s/, /ʃ/, /h/. Affricates /tʃ/, /dʒ/ are shared, with Nepali adding /tʃʰ/, /dʒʱ/. Nepali's trilled /r/, flap /ɽ/contrasts

with English's /ɹ/. The manner of articulation in the English language and the Nepali language can be summarized as follows.

Table 3. *Manner of Articulation*

Manner	Nepali Consonants	English Consonants
Plosives	प /p/, ब /b/, त /t̪/, द /d̪/, ट /ʈ/, ड /ɖ/, क /k/, ग /g/	/p/, /b/, /t/, /d/, /k/, /g/
Aspirated Stops	फ /pʰ/, भ /bʱ/, थ /t̪ʰ/, ध /d̪ʱ/, ठ /ʈʰ/, ढ /ɖʱ/, ख /kʰ/, घ /gʱ/	- (allophonic)
Nasals	म /m/, न /n/, ण /ɳ/, ङ /ŋ/	/m/, /n/, /ŋ/
Fricatives	स /s/, श /ʃ/, ष /ʂ/, ह /h/	/f/, /v/, /s/, /z/, /θ/, /ð/, /ʃ/, /ʒ/, /h/
Affricates	च /tʃ/, ज /dʒ/, छ /tʃʰ/, झ /dʒʱ/	/tʃ/, /dʒ/
Flaps/Taps	र /ɾ/, ड़ /ɽ/	/ɾ/ (US English)
Trills	ऱ /r/	-
Lateral	ल /l/	/l/
Approximants	य /j/, व /w/	/w/, /j/

Learners struggle with English fricatives (e.g., /z/ as [s]) and may not distinguish aspiration in English, producing "pin" [pʰɪn] consistently.

Consonant Clusters

English permits highly complex consonant clusters, including initial three-consonant sequences (e.g., /str-/ in "strength" /strɛŋθ/), medial clusters (e.g., /mpl-/ in "example" /ɪgˈzæmplə/), and final consonant clusters (e.g., /ŋθ/ in "strength"). In contrast, Nepali clusters allow only two consonants in initial position (e.g., /tr-/ in त्रिकोण /trikoɳ/, triangle) and allow all kinds of medial clusters across syllables (e.g., /ktʃ-/ in पोक्चे

/pɔktʃe/, big-cheeked person), and forbid final clusters, usually resorting to vowel insertion for loans or learners' speech (e.g., English "film" /fɪlm/ as [pʰɪlɪm]). Nepali learners simplify English clusters in their speech, producing stop /stɒp/ as [ɪstɔpə], thus calling for pronunciation training.

Vowels in Nepali and English

English has 12 monophthongs (/ɪ/, /e/, /æ/, /ʌ/, /ɑː/, /ɒ/, /ə/, /iː/, /uː/, /ɔː/, /ɜː/, /ʊ/) and 8 diphthongs (/aɪ/, /eɪ/, /oʊ/, /aʊ/, /ɔɪ/, /ɪə/, /ɛə/, /ʊə/). Nepali has 6 monophthongs (/i/, /e/, /a/, /o/, /u/, /iː/, /uː/), and 10 diphthongs ([ui], [ei], [oi], [ʌi], [ai], [iu], [eu], [ou], [ʌu], and [au]) (Bandhu, 1989 as cited in Joshi et al., 2023). Learners reduce "cream" [kri:m] to [krim] or conflate "bit" [bɪt] and "beat" [biːt] as [bit]. The vowel classifications of the English language, as well as the Nepali language, can be presented below.

Table 4. *Vowel Classification by Tongue Position*

Vowel Type	English	Nepali
Front	/i/, /ɪ/, /æ/, /e/	/i/, /e/
Central	/ʌ/, /ə/, /ɜː/	-
Back	/ɑː/, /ɒ/, /ɔː/, /ʊ/, /uː/	/a/, /o/, /u/

Table 5. *Vowel Classification by Height*

Type	English	Nepali
High	/i/, /ɪ/, /uː/, /ʊ/	/i/, /u/
Mid	/e/, /ə/, /ɜː/, /ɔː/	/e/, /o/
Low	/æ/, /ʌ/, /ɑː/	/a/

Table 6. *Vowel Classification by Lip Position*

Type	English	Nepali
Unrounded	/i/, /ɪ/, /e/, /æ/, /ɑː/, /ʌ/, /ɜː/	/i/, /e/, /a/
Rounded	/uː/, /ʊ/, /o/, /ɔː/	/u/, /o/

Suprasegmental Phonology

Suprasegmental features—elements extending beyond individual sounds—shape the prosody, rhythm, and overall flow of speech, presenting significant contrasts between

Nepali and English that challenge Nepali learners in learning English pronunciation and comprehension.

Length. Minimal pairs in English, such as "sit"-"seat," "full"-"fool," and "bit"-"beat," have been problematic for Nepali-speakers. This is because the function of vowel length and quality differs between the two languages. As far as English is concerned, vowel contrasts are primarily phonemic by quality, for instance, /ɪ/ versus /iː/, while length may not be such an important factor and considered merely secondary, existing in specific environments depending on factors such as stress or voice of the following consonant (e.g., [bæːd] vs. [bæt]). Nepali, however, contrasts meaning primarily through phonemic vowel length, giving Nepali learners of English a tendency to confuse or overly rely on duration in English production, for example, hyper-lengthening "seat" [siːt] into [siːːt] or "part" [pɑːrt] into [paːrt]. Such aberrant English pronunciation inevitably brings about confusion in the native receivers who distinguish English words with vowel quality.

From a perceiving point of view, Nepali can induce problems in differentiating English vowels based on quality, usually placing both vowels /ɪ/ and /iː/ into one single [i] in accordance with their length-distinctive system, hence errors such as pronouncing "ship" [ʃɪp] and "sheep" [ʃiːp] both as [sip] or failing to contrast "cot" [kɒt] with "caught" [kɔːt]. These get aggravated by misinterpretations such as mistaking "beach" [biːtʃ] for "bitch" [bɪtʃ] — a misstep Joshi et al. (2023) attributed to Koffi (2019) as the cause of some social blunders.

Stress. English is primarily a stress-timed language, where stressed syllables occur at regular intervals while unstressed syllables are compressed in between for rhythm. Stress can also be phonemic- altering meaning as in "REcord" /ˈrɛkərd/- (noun, a file) versus "reCORD" /rɪˈkɔːrd/- (verb, to document) or "CONtract" /ˈkɒntrækt/- (noun, agreement) versus "conTRACT" /kənˈtrækt/- (verb, to shrink). It also applies to a word pair like "OBject" /ˈɒbdʒɛkt/- (noun, thing) versus "obJECT" /əbˈdʒɛkt/- (verb, to oppose) or even "PREsent" /ˈprɛznt/- (noun/adjective, gift/current) versus "preSENT" /prɪˈzɛnt/- (verb, to offer). Placement of stress is unpredictable and changes across derivatives (as in "PHOto", /ˈfoʊtoʊ/; "phoTOgrapher", /fəˈtɒgrəfər/; and "photoGRAPHic", /ˌfoʊtəˈgræfɪk/), being marked by loudness, pitch, and duration, with

longer words offering secondary stress, such as with example /ˌfoʊtəˈgræfɪk/. In sentences, it provides rhythmic beats, as "She WENT to the STORE" (/ʃi ˈwɛnt tə ðə ˈstɔːr/) compresses "to the," while "The MAN is WALKING" (/ðə ˈmæn ɪz ˈwɔːkɪŋ/) shortens "is."

On the contrary, because of its syllable-timed language, Nepali assigns roughly equal duration to each of its syllables in stress, usually, is on the penultimate syllable (such as "shahar" /ˈsʌhʌr/, city; "sapanā" /sʌˈpʌnā/, dream; "bazaar" /bʌˈzʌr/, market). However, it is not phonemic since it does not alter meaning. Stress shift in "sapanā" from /sʌˈpʌnā/ to /ˈsʌpʌnā/ would still refer to "dream," unlike in English, where it would be phonemically different. Sentences such as "timī ā'udai cha'ū" /tiˈmiː ˈaːuˈdai ˈtʃʌˈuː/ (you are coming) would be divided into even syllable-timing (ti, miː, aːu, dai, tʃʌ, uː) without even compression.

Thus, when learners pronounce syllable-timed stress in English, they produce something like "REcord" /ˈrɛˈkɔːrd/ with equal stress or "PHOto" as /ˈfoˈtoʊ/, or "phoTOgrapher" as /foˈtoˈgrʌˈfʌr/, signifying that those unstressed syllables are not reduced. The full articulation of each syllable calls for flattening, which will convert "She went to the store" into /ʃiː ˈwɛnt ˈtuː ðə ˈstɔːr/, effectively erasing the meaning differences as with "REcord" versus "reCORD" both as /ˈrɛˈkɔːrd/. This condition of things has a fundamental impact on intelligibility and fluency since native speakers rely on stress patterns to parse words and sentences.

Intonation. Sentence stress in English signals the type and intent of a sentence: that is, using a falling pitch in the voice for either statement sentences ("I'm going" /aɪm ˈgoʊɪŋ↓/), commands as in "Sit down" /ˈsɪt daʊn↓/, or wh-questions like "Where are you?" /wɛər ɑːr ju↓/, while using a rising pitch for yes/no questions ("Are you going?" ɑːr ju ˈgoʊɪŋ↑/) or an expression of uncertainty ("Maybe?" /ˈmeɪbi↑/. Special pitch contours, like fall-rise: showing doubt ("I THINK so" /aɪ ˈθɪŋk soʊ↓↑/) or rise-fall: showing enthusiasm ("That's GREAT!" /ðæts ˈgreɪt↑↓/), add meaning in their own right. In this respect, Nepali follows a faintly similar trend, where the falling pitch is used in statements ("timī ā'udai cha'ū" /tiˈmiː ˈaːuˈdaˈi ˈtʃʌˈuː↓/), the rising pitch is used for yes/no questions ("timī ā'udai cha'ū?" /tiˈmiː ˈaːuˈdai ˈtʃʌˈuː↑/), and the falling pitch is normally used for wh-questions ("timī kahã cha'ū?" / tiˈmiː kʌˈhã ˈtʃʌˈuː↓/), though it

changes the pitch for politeness ("tapā'ī ā'nuhūnchha" / tʌˈpaːiː ˈaːuˈnuˈhúːntʃ˥↑/ with a sharper rise).

Learners can follow simple English intonation since it's somewhat similar to Nepali, but they struggle with using it to express feelings or connect it with stress. Consequently, they may opt for a polite rise ("Are you HAPPY?" /ɑːr ju ˈhæpi↑/) over an excited drop-and-rise (/ɑːr ju ˈhaˈpi↑↓/) or might strip a sentence like "I THINK so" /aɪ ˈθɪŋk ˈsoʊ/ of a fall-rise, subsequently destroying the sense of doubt. Overpronunciation of silly syllables (such as "I'm GOing to the SHOP" /aɪm ˈgoʊˈɪŋ ˈtuː ðə ˈstɔːr↓/), killing the stress-timed feel that English feeds on, coming from its syllable-timed Nepali brother.

Pitch. English pitch conveys emotion, peaking on stressed syllables (e.g., "HAPpy" /ˈhæpi↑/ for joy, "I'm tired" /aɪm ˈtaɪərd↓/ for fatigue). Nepali pitch marks politeness: high in "tapā'ī" /tʌˈpaːiː/ (formal "you") versus low in "timī" /tiˈmiː/ (informal "you"). Learners may apply polite pitch to English, saying "Please DO it" /pliːz ˈduː ɪt↑/ formally rather than emphatically, or underuse emotional pitch, producing "I'm SO happy!" /aɪm ˈsoʊ ˈhæpi/ flatly, misaligning with English's expressive prosody.

Tempo. English tempo differs in that it is fast in the contexts of casual speech where reductions are preferred (`I`m gonna go` [aɪmgənəgoʊ]), whereas it is deliberately slow when speaking in formal situations (`Please take your seats` /pliːz ˈteɪk jə ˈsiːts/). Nepali, on the other hand, possesses a constant tempo, as noted in the sentence "timī kasto cha'ū?" /tiˈmiː ˈkʌsˈto ˈtʃʌˈuːː/ consisting of evenly timed syllables. Learners will slow down English phrases, such as casual `"What's up?"` /ˈwɒt ˈɪz ˈʌp/ vs. [wətsʌp], or resist reductions ("I'm gonna" /aɪm ˈgəʊnə/ vs. [aɪmgə]), both of which create a breakdown in fluency.

Juncture. English blurs connection in connected speech, as in "give me" [ˈgɪmi], "handbag" [ˈhæmbæg]. Nepali maintains clear boundaries as, in timī ā'udai cha'ū[ti.mi aːu.dai tʃʌ.uː]. Learners over-enunciate. They would pronounce it as "give me" /ˈgɪv ˈmiː/, or "handbag" /ˈhænd ˈbæg/, missing the English-speaking fluidity of these phrases.

Rhythm. English's stress-time rhythm spaces stressed syllables evenly, "She WENT to the STORE"/ʃi ˈwɛnt tə ðə ˈstɔːr/. Nepali's syllable-time rhythm will equalize syllables as "timī ā'udai cha'ū"/tiˈmiː ˈaːuˈdai ˈtʃʌˈuː/. Learners produce "She went to the

store" into /ʃiː ˈwɛnt ˈtuː ˈðə ˈstɔːr/, thereby flattening rhythm and preventing natural flow.

Conclusion

The comparative analysis of the phonological systems of Nepali and English discloses differences, both segmental and suprasegmental, that sufficiently influence the process by which the Nepalis acquire English as a second language. These differences, influenced by the diverging Indo-European branches of these languages—Indo-Aryan for Nepali, and Germanic for English—show up as challenges in consonantal and vowel inventories, phonotactic rules, and prosodic features, leaving a rich landscape for different types of mental effort by learners in a nation whose system is increasingly taking competence in English to be indispensable. However, leaving aside the contribution of Lado's (1957) Contrastive Analysis Hypothesis, Selinker's (1972) Interlanguage Theory, and Jarvis and Pavlenko's (2008) Cross-Linguistic Influence, the present study has been able to highlight the specific phonological barriers faced by Nepali learners in this regard and their consequences for effective language teaching-learning.

The consonant systems correspondingly diverge segmentally. There are no labiodental fricatives (/f/, /v/), interdental fricatives (/θ/, /ð/), voiced fricatives (/z/, /ʒ/) in Nepali, but retroflex consonants (/ʈ/, /ɖ/, /ʈʰ/, /ɖʱ/) and aspirated stops (/pʰ/, /bʱ/, /tʰ/, /dʱ/, /kʰ/, /gʱ/). Such reciprocal relationships make learners resort to using learned L1 sounds in place of unfamiliar English ones for example /pʰ/ substitutes /f/ such as "fan" is [pʰæn] or /t̪/ substitutes /θ/ as in "think" sounds like [t̪ʰɪŋk], or /dʒ/ substitutes /z/concerning "zoo" as [dʒuː] resulting in interlanguage forms damagingly compromising intelligibility. More precarious is the case for vowels in which English shows 12 monophthongs and 8 diphthongs as against Nepali's 6 monophthongs, having neither central vowels nor gliding sounds. They now tend to assimilate tense-lax pairs, e.g., [bɪt] is "bit" and [biːt] as "beat" are treated as [bit], or everything is approximate-center /ʌ/ or /ə/ is figured with /a/ as "cut" [kʌt] interpreted as [kat], and they reduce most diphthongs, like /aɪ/, as some sort of monophthong or sequence ("buy" [baɪ] as [ba] or [bai]). Consonant clusters pile up these troubles even further, such as English's intricate sequences (/str-/ for example in

"strength", /mpst/ in "glimpsed") against Nepali's favoring more simplistic, vowel-separated structures, /tr-/ in त्रिकोण /trikoṇ/, and /bd/ in शब्द /shabda/ articulated as [sʌbdʌ]. Learners delete betweens with epenthetic vowels "stop" [stɒp] as [sɪtɔp]) or reduce clusters "film" [fɪlm] as [pʰɪləm], thus violating English phonotactics.

Similarly, there are strong differences on suprasegmental levels. Length of vowels in Nepali as phonematic (ka /ka/ vs. kaa /kaː/) contrasts with that of English on vowel quality, causing duration overgeneralization from learners such as [siːt] where they produce "seat" as [siːːt] and some finer distinctions are missed, such as /ɪ/ as compared to /iː/. Frequency stress phonemically in English, itself different from the rhythm of Nepali in being syllable-timed, non-phonemic, causes students to weight syllables equally: fairly simply "PHOto" as /ˈfoˈtoʊ/, "She went to the store" as /ʃiː ˈwɛnt ˈtuː ˈðə ˈstɔːr/. The spoken and written discrepancies may not necessarily concern the presence of lexical tones in both languages, but differ in aspects concerning the processes.

Naturally, the contrasts occur suprasegmentally as well. Such a scenario happens in the case of the phonemic vowel lengths in Nepali (e.g., "ka" /ka/ vs "kaa" /kaː/) as opposed to English's quality-based contrasts. This tends over-eagerly to apply temporality to such vowels as "seat" [siːt] with the expectation of [siːːt] during learning and misses later subtle features such as /ɪ/ or /iː/. The timing rhythm and phonemic stress of English (for example, "REcord" /ˈrɛkərd/ versus "reCORD" /rɪˈkɔːrd/) would contrast with Nepali's syllable-timed, non-phonemic stress. Thus, the learners weigh their realizations evenly across syllables ("PHOto" as /ˈfoˈtoʊ/, "She went to the store" as /ʃiː ˈwɛnt ˈtuː ˈðə ˈstɔːr/), flattening rhythm and obscuring meaning. It is again the absence of lexical tone in both languages that lends them different meanings; the reference here is pitch in Nepali (high pitch in "tapā'ī" /tʌˈpaːiː/), but in English, emotional pitch-poised contrast to that high politeness applies in, say, "Are YOU coming?" /ɑːr ˈjuː ˈkʌmɪŋ↑/ is polite than curiosity or excitement. The intonation contours partially match, falling for statements and rising for questions, but students face difficulties in contouring the stress-integrated accents and emotional overphenomenon with unstressed syllable enunciation. Further differences are pace, juncture, and rhythm, for while things were at a constant pace and clear-enough boundaries in Nepali, they went haywire as they changed tempo and

connected speech in English; thus, got such stilted productions as "give me" /ˈgɪv ˈmiː/ versus [ˈgɪmi].

Lado (1957) said that higher phonological contrast, no matter periphery-wise, equates greater learning difficulties, for example, for English fricatives and clusters or Nepali retroflexes and syllable timing. This fluent framework of interlanguage lays open most of the transitional systems of learners, like vowel insertion or stress misplacement, as hybrids of Nepali and English. Cross-linguistic influence, as proposed by Jarvis and Pavlenko (2008), stresses how the phonology of Nepali transfers to English, informing mispronunciation errors (e.g., /pʰ/ to /f/, even rhythm) that are left unattended and remain entrenched. Hence, these theories together point out that the failures of Nepali learners are not accidental but systematic and have their roots in structural disparities that are further enhanced by little exposure to native English models in Nepal's classrooms.

SLA implications are very clear and, worse, the multilingual educational context of Nepal itself. There existed problems related to pronunciation hindering intelligibility, fluency, and communicative competence that ultimately lower learners' confidence as well as opportunities in English-structured settings. These problems, however, are part of the challenge that teachers must face in adopting targeted strategies. Here are a few phonetic training exercises focusing on unfamiliar sounds for segmental issues: /f/, /v/, /θ/, /ð/, /z/, /ʒ/ (i.e., "fan" vs. "pan," "think" vs. "sink," "zoo" vs. "sue") to develop perception and production. Vowel exercises need to focus on tension ("bit" versus "beat", "full" versus "fool") and diphthongs ("buy", "go", "cow"), provided with visual shows such as vowel trapeziums to project the larger map of the English system against Nepali. Cluster practice should involve progressive complexity (for example, "stop," "street," and "strength"), countering epenthesis with listening and repetition tasks to internalize English phonotactics.

In terms of training, few suprasegmental challenges exist. Length exercises should be meant to clarify quality rather than longer duration (for instance, whether "cot" is longer than "caught" or not); this thereby reduces overextension. Stress drills are designed to bring out phonemic contrasts (such as those between "REcord" and "reCORD"), which may even be focused on sentence rhythm (example, "She WENT to the STORE"), using exaggerated stress patterns to break the habits of a syllable-timed

pattern. Pitch and intonation practice should change the view of students from politeness-based rises associated with the English language toward its emotive contours using role-plays based on excitement ("That's GREAT!") and doubt ("I THINK so"). Tempo and juncture training could work toward helping connected speech (e.g., "gonna," "wanna") towards shadowing native recordings while rhythm exercises would reinforce stress timing with the likes of chants or poetry (e.g., "Twinkle, TWINKle, LITtle STAR") into the very heart of English's beat.

These strategies need resources - phonetic laboratories, trained teachers, cultural materials - most of which are nearly nonexistent in Nepal. But their implementation could revolutionize English teaching and link it with learners' linguistic realities. By taking segmental accuracy and suprasegmental fluency into account, the phono-bridge would transform Nepali learners' English into an instrument of their potential in a globalized world. This study would further deepen the understanding of Nepali-English phonological interplay and calls for a pedagogical shift in terms of pronunciation being one of the very important elements of communication in SLA.

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