SOUND CHANGE MECHANISMS IN ENGLISH AND INDONESIAN: A CONTRASTIVE PHONOLOGICAL APPROACH TO EFL INSTRUCTION

Masagus Sulaiman[1)*], Indawan Syahri[2)], Kurnia Saputri[3)], Mira Tania[4)]
[1) 2) 3) 4)]English Education Study Program, Faculty of Teacher Training and Education
Universitas Muhammadiyah Palembang, Indonesia
[1)]masagus_sulaiman@um-palembang.ac.id, [2)] indawansyahri_ump@yahoo.co.id
[3)]kurniasaputri93@gmail.com [4)] miratania08.hm@gmail.com

Corresponding e-mail: masagus_sulaiman@um-palembang.ac.id

Abstract

This study investigates sound change mechanisms in English and Indonesian through a contrastive phonological approach, with the aim of identifying similarities and differences between the two languages, exploring learning difficulties experienced by students, and proposing pedagogical implications for teaching English as a foreign language (TEFL). A qualitative research design was adopted, and the data were collected through documentation techniques and analyzed descriptively. The results reveal two major similarities and three major differences in sound change between English and Indonesian. The similarities involve regressive and progressive sound changes at the single-word level and in prefixation. In contrast, the differences are observed in regressive, progressive, and reciprocal sound changes at the two-word level, in suffixation and circumfixation, which are identified as unfamiliar features that may cause learning difficulties. The pedagogical implications of this study provide practical instructional guidelines for developing more systematic and effective pronunciation practices related to sound change mechanisms.

Keywords: *sound change mechanisms; contrastive phonology; EFL Instruction*

DOI: *https://doi.org/10.32502/ecj.v10i1.10926*

Introduction

As this study focuses on language, a clear definition of the term is necessary. Language is a conventional symbolic system used by humans to express and communicate ideas, emotions, and intentions, mainly through speech sounds and other sign forms. These symbols are systematically organized into linguistic units and governed by phonological, morphological, and syntactic rules that shape how meaning is formed and interpreted within a speech community. Realized as physical forms such as sounds or letters, language may also appear in visual forms as arbitrary symbols with shared meanings, enabling effective communication in both spoken and written forms (Evans & Levinson, 2021); (Fabbro et al., 2022);(Hyman, 2022); (Papazian, 2025); (Ramadhanti et al., 2023); (Sulaiman et al., 2022).

From a linguistic and semiotic perspective, language is a structured and hierarchical system of interconnected units, from basic sounds to complex meaningful constructions, which together enable humans to encode and decode experience through speech and writing. As a socially constructed system of conventional signs, language links form and meaning through sounds, letters, or symbols, facilitating communication, coordination, and shared understanding within a community. Language is also a cognitive and communicative mechanism, where its structure is closely connected to human thought processes, guiding how

people produce, interpret, and understand meaning. (Orazbaeva et al., 2025); (Shokirova, 2025).

As a foreign language, English plays a crucial role after students' first language, Bahasa Indonesia. Despite its importance, many students encounter difficulties in learning and practicing English pronunciation. It happens because English and Indonesian have different phonetic alphabets. In this context, Indonesian has a direct relationship between spelling and pronunciation, unlike English. (Abrar et al., 2018); (Karlina et al., 2020). However, a variety of students' language backgrounds can also influence phonological transfer from their first language to the target language. (Zen, 2020).

One of the potential learning difficulties encountered by students in learning English and Indonesian pronunciation is the occurrence of sound change. For example, in English, the phrase *don't you* is commonly pronounced [dəʊntʃuː] rather than [dəʊnt juː] due to the interaction between the final [t] and the initial [j]. Similarly, in Bahasa Indonesia, like circumfix *ke-…-an* in the word *duduk* is pronounced [dudu?] rather than [duduk], resulting from morphophonemic adjustment influenced by the presence of the prefix *ke-* and the suffix *-an*.

These problems can be effectively examined through contrastive analysis. Contrastive analysis is a systematic comparison of two languages aimed at identifying similarities and differences and explaining learning difficulties in second or foreign language acquisition (Sukirmiyadi, 2018); (Thyab, 2022). In addition, contrastive analysis refers to a systematic and theory-based approach that compares two languages in order to reveal their structural similarities and differences that may affect language learning. This approach aims to explain the influence of learners' first language (L1) on second language (L2) acquisition, anticipate potential learning difficulties, and provide insights for instructional practices and curriculum development in language education (Khansir & Pakdel, 2019); (Nedjar, 2025).

Theoretically, contrastive analysis has three main versions, namely: the strong, weak and moderate forms. The strong form is the prime or sole cause of difficulty and error in foreign language learning intruded by the learners' native language. The weak form regards the linguist's best knowledge used to account for second language learning difficulties. The moderate form predicts learning difficulties based on error analysis results, particularly in spelling and dictation tasks. (Khansir & Pakdel, 2019).

Furthermore, (Al-Khresheh, 2016) identifies five main steps in comparing two or more languages. First, selection involves choosing the languages to be analyzed, typically L1 and L2, and developing formal descriptions of them using an appropriate theoretical framework, which may be conventional, structural, or transformational. Second, description refers to analyzing and detailing the linguistic units or structures of the selected languages according to contrastive analysis theories in order to identify differences. Third, comparison entails systematically examining the described linguistic elements to highlight similarities and differences. Fourth, prediction focuses on anticipating areas where learners may encounter difficulties. Finally, verification involves testing these predictions to determine whether the predicted difficulties actually occur based on the contrastive analysis outcomes. In conclusion, contrastive analysis is a comparative linguistic approach employed to examine two languages in order to identify

learning difficulties and provide pedagogical implications for language instruction.

This study employs contrastive analysis to examine the phonological systems of English and Indonesian, particularly in relation to sound changes**.** Sound change is a phonological modification that occurs when language users alter the distribution of phonemes within a language (Diani & Azwandi, 2021)**.** Furthermore, sound change is guided by the interaction of structured patterns in a language's sound system uphold phonemic contrasts and enable effective communication. (Cho et al., 2026); (Stenbrenden, 2025).

Previous studies have widely discussed contrastive analysis as an effective approach for identifying similarities and differences between language systems and predicting potential learning difficulties in second or foreign language acquisition (Khansir & Pakdel, 2019); (Nedjar, 2025). In phonological studies, sound change has also been extensively examined, particularly in relation to phoneme distribution, sound change processes, and historical linguistic development (Cho et al., 2026); (Diani & Azwandi, 2021).

Moreover, studies on English pronunciation difficulties among EFL learners has consistently reported problems related to non-native sound perception and production, often attributed to differences between learners' first language and the target language phonological systems (Abrar et al., 2018); (Karlina et al., 2020); (Zen, 2020). These studies highlight the importance of phonological awareness and explicit instruction in addressing pronunciation challenges.

However, despite the growing body of study on contrastive analysis, sound change, and EFL pronunciation, existing studies tend to examine these aspects separately. Most contrastive phonological studies focus on segmental differences or general phonological contrasts, while studies on sound change predominantly emphasize historical linguistics or single-language analysis. Consequently, there is still a lack of systematic contrastive studies that specifically investigate sound change mechanisms in English and Indonesian in parallel, particularly those that examine how these phonological processes affect learners' pronunciation and contribute to learning difficulties in EFL contexts.

To address this gap, the present study offers a novel contribution by conducting a systematic contrastive phonological analysis of sound change mechanisms in English and Indonesian. Unlike previous studies that treat sound change or contrastive analysis independently, this study integrates both perspectives to examine regressive, progressive, and reciprocal sound change processes across the two languages.

Furthermore, this study emphasizes the pedagogical relevance of these phonological differences by explicitly linking the contrastive findings to potential learning difficulties and instructional implications for English as a Foreign Language (EFL) pronunciation teaching. Therefore, this study aims to investigate the mechanisms of sound change in English and Indonesian through a contrastive phonological approach in order to identify their similarities and differences, explore potential pronunciation learning difficulties, and propose pedagogical implications for EFL instruction.

Methodology

This study employs a qualitative research design to explore the phenomenon through in-depth analysis of non-numerical data to gain meaningful insights, as commonly

outlined in qualitative research literature (Dahal, 2025); (Rustamana et al., 2024). In line with this approach, qualitative research follows systematic procedures of the scientific method, including identifying the research problem, reviewing relevant literature, formulating research questions, collecting and analyzing data, and preparing a comprehensive research report (Creswell & Poth, 2023).

The data were collected from two categories of sources: primary and secondary. The primary data comprised authoritative linguistic textbooks, including *English Phonetics, Phonology and Spelling for the English Language Teacher* (Bauer, 2023) and *Fonologi Bahasa Indonesia* (Akhyaruddin et al., 2020). The secondary data were drawn from relevant national and international journal articles examining phonological processes and sound change phenomena in English and Indonesian (Rattanasak, 2025); (Al Faris et al., 2024).

Once the data were collected, they were analyzed using descriptive analysis, informed by commonly used qualitative analytical procedures, including familiarization with the dataset, data classification, identification of recurring patterns, interpretation in relation to the research questions, and the drawing of conclusions (Ahmed et al., 2025); (Goyanes et al., 2025); (Kazanskaia, 2025); (Syahri et al., 2025). In this process, sound changes in English and Indonesian were described and compared to identify similarities and differences, as well as potential difficulties encountered by students in understanding sound changes in both languages.

Results and Discussion

This study investigates sound changes in English and Indonesian, highlighting their similarities and differences as well as the potential learning difficulties faced by EFL learners in mastering these phonological processes. The English sound change patterns are summarized in Table 1.

Table 1. English Sound Change Pattern

No.	Instances	Phonetic Transcription
1	open	[əupm]
2	can	[kəŋ]
3	seven	[sevnŋ]
4	don’t	[dəuŋk] or [doump]
5	handbook	[hæmbuk]
6	hit you	[hitju:]
7	miss you	[miʃu:]
8	ten mice	[tem mais]
9	went back	[wem bæk]
10	handbag	[hæmbæk]
11	could you	[kudʒu]
12	don’t you	[dəunʧu]
13	church street	[ʧə:ʧ ʃtri;t]
14	give me	[gimmi:]
15	IN- + correct	[iŋkərekt]
16	IN- + polite	[impə‟lait]
17	IN- + logic	[illɔdʒik]
18	IN- + rational	[irræʃənl]
19	books	[buks]
20	rooms	[ru:mz]
21	watches	[wɒtʃɪz]
22	laugh	[lɑ:ft]
24	played	[pleɪd]

Table 1 presents twenty four commonly occurring instances of English sound change observed in everyday spoken discourse, categorized into regressive and progressive. Regressive (anticipatory) sound changes occur at the single-word level, as in *handbag* pronounced [hæmbæg], at the two-word level, as in *went back* pronounced [wem bæk], *hit you* pronounced [hɪtjuː], *miss you* pronounced [mɪʃuː], *ten mice* pronounced [tem maɪs], *could you* pronounced [kʊdʒuː], *don't you* pronounced [dəʊntʃuː], *church street* pronounced [tʃɜːtʃ ʃtriːt], and *give me* pronounced [gɪmiː]. These happen because of the combination of final and initial sounds of voiced and voiceless consonants of two base words, whereas in prefixed forms, such as *in-* + *polite* → *impolite* pronounced [ɪmˈpɒlaɪt] and *in-* + *logic* → *illogic* pronounced [ɪlˈlɒdʒɪk]. These regressive changes are triggered by the influence of the following consonants [b], [p], and [l].

Progressive sound changes are observed at the single-word level, as in *can* pronounced [kəŋ] and *open* pronounced [əʊpm], where the following sounds are affected by preceding consonants [k] and [p]. Additional cases of progressive sound changes involve suffixation, as in *books* pronounced [bʊks], *rooms* pronounced [ruːmz], *watches* pronounced [wɒtʃɪz], *laugh* pronounced [lɑːft], and *played* pronounced [pleɪd] where the pronunciation of the suffix is influenced by the voicing of the preceding voiceless consonants [k]and [tʃ] and voiced consonants [m] and [y]. Conversely, instances of Indonesian sound change pattern are illustrated in Table 2.

Table 2. Indonesian Sound Change Pattern

No.	Instances	Phonetic Transcription
1	jawab	[jawap]
2	sebab	[sebap]
3	adab	[adap]
4	wujud	[wujut]
5	abad	[abat]
6	log	[lok]
7	sabtu	[saptu]
8	absen	[apsen]
9	Jihad	[jihat]
10	lembab	[lembap]
11	meN- + pakai	[memakai]
12	meN- + sewa	[menyewa]
13	meN- + harap	[mengharap]
14	meN- + daki	[mendaki]
15	peN- + pohon	[pemohon]
16	peN- + gerek	[penggerek]
17	peN- + diri	[pendiri]
18	peN- + tulis	[penulis]
19	peN- + suplai	[pensuplai]
20	per- + kerja	[pekerja]
21	ter- + percaya	[tepercaya]
22	ber- + ternak	[beternak]
23	Ke- + dudu? + an	[kedudukan]

Table 2 illustrates twenty three commonly occurring instances of sound change in Indonesian as observed in everyday spoken discourse. These instances are classified into regressive, progressive, and reciprocal types. Regressive (anticipatory) sound changes are evident at the single-word level, as in *sabtu* pronounced [saptu] and *absen* pronounced [apsen], where the changes

are triggered by the influence of the following consonants [t] and [s]. Additional regressive sound changes occur in prefixed forms, such as *meN-* + *beli* → [membeli], *peN-* + *tulis* → [penulis], *per-* + *kerja* → [pekerja], *ter-* + *percaya* → [tepercaya], and *ber-* + *ternak* → [beternak]. These forms reflect the influence of the following consonants [b], [t], [k], and [p].

Progressive sound changes are also observed at the single-word level, as in *jawab* pronounced [jawap], *wujud* pronounced [wujut], and *log* pronounced [lok], where the changes are conditioned by the preceding voiced consonants [w], [j], and [g]. Reciprocal (mutual) sound change is exemplified by the circumfix *ke-…-a* in the word *duduk* is pronounced [dudu?] rather than [duduk], resulting from morphophonemic adjustment influenced by the presence of the prefix *ke-* and the suffix *-an*. In addition, this study examines the similarities and differences between English and Indonesian sound change patterns. Two major similarities are identified in relation to regressive and progressive at the single-word level and in prefixation. The regressive sound change similarities at the single-word level are outlined in Table 3.

Table 3. Regressive Sound Change Similarities at the Single-Word Level

No.	English Sound Change		Indonesian Sound Change	
	Instances	**Phonetic Transciption**	**Instances**	**Phonetic Transciption**
1	handbag	[hæmbæg]	sabtu	[saptu]
2	handbook	[hæmbuk]	absen	[apsen]
3	newspaper	[nju:ʃˌpeɪpə]	subtansi	[suptansi]
4	input	[imput]	absolut	[apsolut]
5	handkerchief	[hæŋkətʃif]	madrasah	[matrasah]

Table 3 outlines five instances of regressive similarities in sound change between English and Indonesian at the single-word level. In English, these include *handbag* pronounced [hæmbæg], *handbook* pronounced [hæmbʊk], *newspaper* pronounced [nju:ʃˌpeɪpə], *input* pronounced [ɪmput], and *handkerchief* pronounced [hæŋkətʃɪf]. In Indonesian, comparable patterns are observed in *sabtu* pronounced [saptu], *absen* pronounced [apsen], *subtansi* pronounced [suptansi], *absolut* pronounced [apsolut], and *madrasah* pronounced [matrasah]. These regressive sound changes occur due to the influence of the following voiced and voiceless consonants [b], [d], [k], [p], [s], and [t]. Additional regressive similarities in both English and Indonesian are also found in prefixed forms, as presented in Table 4

Table 4. Regressive Sound Change Similarities in Prefixes

No.	English Sound Change		Indonesian Sound Change	
	Instances	**Phonetic Transcription**	**Instances**	**Phonetic Transcription**
1	imprecise	[imprisais]	meN- + langgar	[melanggar]
2	impractical	[impræktikl]	meN- + maki	[memaki]
3	improbable	[imprɔbəbl]	meN- + nanti	[menanti]
4	impassive	[impæsiv]	meN- + nganga	[menganga]
5	impregnable	[impregnəbl]	meN- + yanyi	[menyanyi]
6	imperfect	[impərfikt]	meN- + rasa	[merasa]
7	impolite	[impəlait]	meN- + yakinkan	[meyakinkan]
8	impersonal	[impərsənl]	meN- + warisi	[mewarisi]
9	imposter	[impɔstər]	meN- + bius	[membius]
10	impassable	[impa:səbl]	meN- + fitnah	[memfitnah]

11	impetinent	[impətinənt]	meN- + gebur	[mengebur]
12	impervious	[impəːviəs]	meN- + ngecat	[mengecat]
13	improper	[imprɔpər]	meN- + vonis	[memvonis]
14	imperceptible	[impərsiptəbl]	meN- + pukul	[memukul]
15	imponderable	[impɔndərəbl]	meN- + data	[mendata]
16	immeasurable	[imeʒərəbl]	meN- + jual	[menjual]
17	imbalance	[imbæləns]	meN- + curi	[mencuri]
18	imbenevolent	[imbinevələnt]	meN- + ajak	[mengajak]
19	immaterial	[imətiriəl]	meN- + eram	[mengeram]
20	immature	[imətʃuə]	meN- + injak	[menginjak]
21	immoral	[imorəl]	meN- + obral	[mengobral]
22	immortal	[imɔrtəl]	meN- + ukir	[mengukir]
23	immoderate	[imɔdəreit]	meN- + gosok	[menggosok]
24	immodesty	[imɔdəsti]	meN- + hias	[menghias]
25	immovable	[imuvəbl]	meN- + gaji	[mengaji]
26	immodest	[imɔdəst]	meN- + suplai	[menyuplai]
27	immobile	[imɔbail]	peN- + lamar	[pelamar]
28	incapable	[iŋkeipəbl]	peN- + minum	[peminum]
29	incorrigible	[iŋkɔridʒəbl]	peN- + naik darah	[penaik darah]
30	inconsiderate	[iŋkənsidreit]	peN- + nyanyi	[penyanyi]
31	incredible	[iŋkridibəl]	peN- + raba	[peraba]
32	incurable	[iŋkjuərəbl]	peN- + warna	[pewarna]
33	incorrect	[iŋkərekt]	peN- + bohong	[pembohong]
34	inconclusive	[iŋkənklusiv]	peN- + fitnah	[pemfitnah]
35	incomprensible	[iŋkɔmprihənsəbl]	peN- + vonis	[pemvonis]
36	inconspicuous	[iŋkənspkijuəs]	peN- + pukul	[pemukul]
37	incoherent	[iŋkəuhiər]	peN- + duduk	[penduduk]
38	incapacitate	[iŋkəpæsiteit]	peN- + jilat	[penjilat]
39	inconceivable	[iŋkɔnsivəbl]	peN- + ceramah	[penceramah]
40	incompetent	[iŋkɔmpitənt]	peN- + atur	[pengatur]
41	inconvenient	[iŋkənviniənt]	peN- + geruk	[pengeruk]
42	incombustible	[iŋkəmbsʌtəbl]	peN- + ikat	[pengikat]
43	incomparable	[iŋkɔmprəbl]	peN- + obrol	[pengobrol]
44	incompatible	[iŋkəmpætəbl]	peN- + ukur	[pengukur]
45	incomplete	[iŋkəmplit]	peN- + garuk	[penggaruk]
46	inconsistent	[iŋkənsistən]	peN- + hubung	[penghubung]
47	ingratitude	[iŋgrætitʃuːd]	peN- + hisap	[penghisap]
48	inglorious	[iŋglɔːriəs]	peN- + kejar	[pengejar]
49	ingrained	[iŋgreind]	peN- + suap	[penyuap]

Table 4 presents English negative prefix *in-* undergoes sound change depending on the following consonants. When preceding voiced or voiceless bilabial stops such as [p], [b], and [m], the prefix changes into *im-***,** a voiced bilabial nasal. When preceding voiced or voiceless velar stops such as [k] and [g], it changes into [iŋ-]**,** a voiced velar nasal. Similarly, in Indonesian, the prefix *meN-* exhibits several sound change patterns based on the initial sound of the base word. It becomes *me-*before sounds like [l], [m], [n], [ŋ], [ñ], [r], [y], and [w]; *mem-"* before [b], [f], [v], and [p], *men-* before [d], [t], [ʧ], and [ʤ]; *meng-* before vowels [a], [e], [i], [o], [u], and consonants [g], [h], [k]; *meny-* before /s/. The Indonesian prefix *peN-* follows a similar sound change pattern. It becomes *pe-* before [l], [m], [n], [ŋ], [ñ], [r/] and [w]; "pem-" before [b], [f], [v], and [p]; *pen-* before [d], [t], [ʧ], and [ʤ]; "peng-" before [a], [e], [i/], [o], [u], and [g], [h], [k]; and "peny-" before /s/. Additional regressive sound change similarities in prefixes are clearly shown in Table 5.

Table 5. Additional Regressive Sound Change Similarities in Prefixes

No.	English Sound Change		Indonesian Sound Change	
	Instances	Phonetic Transcription	Instances	Phonetic Transcription
1	illiterate	[ilətəreit]	per- + lari	[pelari]
2	illogical	[ilɔdʒikl]	per- + kerja	[pekerja]
3	illigible	[iledʒbəl]	per- + renang	[perenang]
4	irrelevant	[ireləvənt]	per- + serta	[peserta]
5	irresponsible	[irispɔnsəbl]	ber- + rakit	[berakit]
6	irrational	[iræʃnəl]	ber- + rupa	[berupa]
7	irreligious	[irilidʒəs]	ber- + ajar	[belajar]
8	irregular	[iregjələr]	ber- + embuk	[berembuk]
9	indescribable	[indiskraibəbl]	ber- + kerja	[bekerja]
10	indisputable	[indispjutəbl]	ber- + serta	[beserta]
11	indifferent	[indifrənt]	ter- + lantar	[telantar]
12	intolerable	[/intɔlərəbl]	ter- + potong	[tepotong]
13	intransitive	[intrænsətiv]	ter- + rasa	[terasa]

Table 5 shows that the English negative prefix *in-* undergoes systematic sound alternation conditioned by the following consonant. When it precedes the voiced alveolar lateral [l], the prefix is pronounced [*il-*], and when it occurs before the voiced alveolar rhotic [r], it surfaces as *ir-*. In addition, the prefix remains *in-* when followed by voiced or voiceless alveolar stops such as [t] and [d], as illustrated in *illiterate*, *irregular*, *indifferent*, and *intolerable*.

In Indonesian, the prefixes *per-* and *ber-* are reduced to *pe-* and *be-* when they precede base words beginning with consonants such as [l], [k], [r], and [s], as in *pelari*, *pekerja*, *perenang*, *peserta*, *belajar*, *bekerja*, and *beserta*. The prefix *ter-* is similarly reduced to *te-* before [l], [p], and [r], as in *telantar*, *tepotong*, and *terasa*. By contrast, *ter-* retains its full form when it occurs before both voiced and voiceless consonants, including [ʧ], [p], [b], [t], [s], [dʒ], and [h], as exemplified by *tercatat*, *terputus*, *terbuka*, *tertarik*, *tersedia*, *terjamin*, and *terhormat*. A further similarity between English and Indonesian sound change patterns is also observed in progressive sound change at the single-word level; these instances are presented in Table 6.

Table 6. Progressive Sound Change Similarities at the Single-Word Level

No	English Sound Change		Indonesian Sound Change	
	Instances	Phonetic Transciption	Instances	Phonetic Transciption
1	open	[əupm]	wujud	[wujut]
2	can	[kəŋ]	jihad	[jihat]
3	bacon	[beikəŋ]	jawab	[jawap]
4	seven	[sevnŋ]	adab	[adap]
5	don't	[dəuŋk] or [doump]	log	[lok]

Table 6 presents five instances of progressive sound change similarities between English and Indonesian at the single-word level. In English, these include *open* pronounced [əʊpm], *can* pronounced [kəŋ], *bacon* pronounced [beɪkəŋ], *seven* pronounced [sevn̩], and *don't* pronounced [dəʊŋk] or [dəʊmp]. These progressive sound changes are conditioned by the influence of preceding voiced and voiceless consonants, namely [p], [k], [b], [v], and [n]. In Indonesian, comparable progressive patterns are observed in *wujud* pronounced [wujut], *jihad* pronounced [jihat], *jawab* pronounced [jawap], *adab* pronounced [adap], and *log* pronounced [lok].

In addition to these similarities, this study also identifies differences between English and Indonesian sound change patterns. Three major differences are observed across regressive, progressive, and reciprocal processes, occurring at the two-word level as well as in suffixation and circumfixation. Notably, regressive sound change at the two-word level is found exclusively in English and not in Indonesian, for instances: *hit you* pronounced[hɪtjuː], *miss you* pronounced [mɪʃuː], *ten mice* pronounced [tem maɪs], *went back* pronounced [wem bæk], *could you* pronounced [kʊdʒuː], *don't you* pronounced [dəʊntʃuː], *church street* pronounced [tʃɜːtʃ ʃtriːt], and *give me* pronounced [gɪmiː]. These forms arise from phonological interaction between the final segment of the first word and the initial segment of the following word, involving both voiced and voiceless consonants

Furthermore, progressive sound change in suffixation is observed only in English and not in Indonesian, like *books* pronounced [bʊks], *rooms* pronounced [ruːmz], *watches* pronounced [wɒtʃɪz], *laughed* pronounced [lɑːft], and *played* pronounced [pleɪd]. These changes are conditioned by the preceding voiceless consonants, such as [k] and [tʃ] triggering voiceless suffixes, and voiced consonants such as [m] and [j]. Unlike English, Indonesian exhibits reciprocal sound change in circumfixation, in which phonological interaction occurs between the prefix, suffix, and the base. This process is exemplified by the circumfix *ke-…-an* attaching to the base *dudu?* resulting in the form [kedudukan].

Conclusion

This analysis identifies two similarities and three differences in sound change patterns between English and Indonesian. The two key similarities had something to do with regressive and progressive at the single-word level and in prefixation. While, the three major differences had been in line with regressive, progressive and reciprocal at the two-word level, in suffixation and circumfixation were identified as unfamiliar features that might pose learning difficulties for students studying sound changes in both languages. In this context, they encountered such problems on phonological systems which made them difficult to perceive and produce non-native or unfamiliar sounds, recognize sound changes in natural speech, and distinguish phonemic forms from phonetic variation.

Furthermore, the results of this study also indicated that pronunciation teaching should be clear and explicit instruction in contrastive phonology. Sound change patterns in English and Indonesian should be explained by highlighting their key similarities and differences in order to support students' spoken production. Pronunciation instruction should be prioritized toward intelligibility in speaking rather than native-like accuracy. The integration of phonology with affixation can facilitate a clearer understanding of systematic sound changes and their application in speech.

In conclusion, students' confusion can be reduced and speaking performance can be improved in EFL contexts through an explicit and contrastive instructional approach. Therefore, the pedagogical implications of this study provide practical instructional guidelines for the design of more systematic and effective pronunciation practices related to sound change mechanisms.

ISSN 2549–9009 *(print),* ISSN 2579–7378 *(online)*

References

Abrar, M., Mukminin, A., Habibi, A., Asyrafi, F., Makmur, & Marzulina, L. (2018). If our English isn't a language, what is it? Indonesian EFL student teachers' challenges in speaking English. *The Qualitative Report*, *23*(1), 129. https://nsuworks.nova.edu/tqr/vol23/iss1/9

Ahmed, S. K., Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., Ameen, B. M. M., & Khdhir, R. M. (2025). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery and Public Health*, *6*, 100198. https://doi.org/10.1016/j.glmedi.2025.100198

Akhyaruddin, Harahap, E. P., & Yusra, H. (2020). *Fonologi Bahasa Indonesia*. Komunitas Gemulun Indonesia.

Al-Khresheh, M. H. (2016). A review study of contrastive analysis theory. *International Journal of Advances in Humanities and Social Sciences*, *2*(6), 330–338.

Al Faris, S., Tsania, I. L., & Badrih, M. (2024). Perubahan bunyi bahasa pada proses peluluhan tata bahasa Indonesia: Kajian fonologi. *Jurnal Onoma: Pendidikan Bahasa Dan Sastra*, *10*(2), 2071–2079. https://doi.org/10.30605/onoma.v10i2.3670

Bauer, L. (2023). *English phonetics, phonology and spelling for the English language teacher*. Routledge. https://doi.org/10.4324/9781032637020

Cho, T., Kim, S., & Mitterer, H. (2026). Linguistic and cognitive functions of fine phonetic detail underlying sound systems and sound change. *Journal of Phonetics*, *114*, 765. https://doi.org/10.1016/j.wocn.2025.101470

Creswell, J. W., & Poth, C. N. (2023). *Qualitative inquiry and research design: Choosing among five approaches* (5 (ed.)). SAGE Publications.

Dahal, N. (2025). Qualitative data analysis: Reflections, procedures, and some points for consideration. *Frontiers in Research Metrics and Analytics*, *10*, 1669578. https://doi.org/10.3389/frma.2025.1669578

Diani, I., & Azwandi. (2021). Phonological change processes of English and Indonesian. *Journal of Applied Linguistics and Literature*, *6*(1). https://doi.org/10.33369/joall.v6i1.13642

Evans, N., & Levinson, S. C. (2021). The myth of language universals: Language diversity and its importance for cognitive science. *Behavioral and Brain Sciences*, *44*, e2. https://doi.org/10.1017/S0140525X2000032X

Fabbro, F., Fabbro, A., & Crescentini, C. (2022). The nature and function of languages. *Languages*, *7*(4), 303. https://doi.org/10.3390/languages7040303

Goyanes, M., Lopezosa, C., & Jordá, B. (2025). Thematic analysis of interview data with ChatGPT. *Quality & Quantity*, *59*, 5491–5510. https://doi.org/10.1007/s11135-025-02199-3

Hyman, L. M. (2022). Phonological theory and the structure of sound systems. *Linguistic Inquiry*, *53*(2), 235–278.

https://doi.org/10.1162/ling_a_00432

Karlina, Y., Rahman, A., & Chowdhury, R. (2020). Designing phonetic alphabets for Bahasa Indonesia (PABI) for the teaching intelligible English pronunciation in Indonesia. *Indonesian Journal of Applied Linguistics*, *9*(3), 724–732. https://doi.org/10.17509/ijal.v9i3.23223

Kazanskaia, A. N. (2025). Data analysis and interpretation in qualitative research. *NEYA Global Journal of Non-Profit Studies*. https://doi.org/10.64357/neya-gjnps-ql-rchfr-mth-08

Khansir, A. A., & Pakdel, F. (2019). Contrastive analysis hypothesis and second language learning. *Journal of ELT Research*, *4*(1), 35–43.

Nedjar, D. (2025). Contrastive linguistics for language acquisition and learning: An analytical study. *International Journal of Innovative Technologies in Social Science*, *2*(46). https://doi.org/10.31435/ijitss.2(46).2025.3381

Orazbaeva, F. S., Ryskulova, A. D., Orazaliyeva, E. N., & Rauandina, A. K. (2025). Generative cognitive model of linguistics structure and thought process in the Kazakh language. *Journal of Linguistics and Language*, *3*(1), 17–37. https://doi.org/10.61978/lingua.v3i1.617

Papazian, E. (2025). The linguistic sign and the subsystems of language. *International Journal of Language and Linguistics*, *13*(1), 11–18. https://doi.org/10.11648/j.ijll.20251301.13

Ramadhanti, T., Syahri, I., & Sulaiman, M. (2023). English and Indonesian letter-writing. *English Community Journal*, *7*(1), 1–11. https://doi.org/10.32502/ecj.v7i1

Rattanasak, S. (2025). Phonological processes in English connected speech: implications for L2 speech learning and communication Phonological processes in English connected speech*:* implications for L2 speech learning and communication.*Cogent Education, 12* (1) https://doi.org/10.1080/2331186X.2025.2472474

Rustamana, A., Adillah, P. M., Maharani, N. K., & Fayyedh, F. A. (2024). Qualitative research methods. *Indonesian Journal of Interdisciplinary Research in Science and Technology*, *2*(6), 919–930. https://doi.org/10.55927/marcopolo.v2i6.9907

Shokirova, K. (2025). The semiotic system and structure of language. *Emergent: Journal of Educational Discoveries and Lifelong Learning*, *6*(3), 1–5. https://doi.org/10.47134/emergent.v4i1.65

Stenbrenden, G. F. (2025). *Phonological Change BT - The new Cambridge history of the English language* (J. C. Beal (ed.); pp. 198–223). Cambridge University Press. https://doi.org/10.1017/9781009205870.010

Sukirmiyadi. (2018). The role of contrastive analysis in translation study. *International Journal on Studies in English Language and Literature*, *6*(9), 30–34.

Sulaiman, M., Syahri, I., & Saputri, K. (2022). A contrastive analysis between English and Indonesian copulative verbs. *English Community Journal*, *6*(1), 36–45.

Syahri, I., Sulaiman, M., & Susanti, R. (2025). *Metodologi penelitian bahasa: Panduan praktis, metode dan analisis penelitian bahasa* (1st ed.). Noerfikri Offset.

Thyab, R. A. (2022). A contrastive analysis of relative clause grammar in both Arabic and English. *Rimak International Journal of Humanities and Social Sciences*, *4*(1), 231–237. http://dx.doi.org/10.47832/2717-8293.15.17

Zen, E. L. (2020). Role of regional language background and speech styles on the production of voice onset time (VOT) in English among Indonesian multilingualism. *Indonesian Journal of Applied Linguistics*, *10*(2), 359–368. https://doi.org/10.17509/ijal.v10i2.28604