

The Effectiveness of the Comparative Study of Languages with Different Structures in the Field of Phonetics (English and Kazakh Languages)

Zaure Badanbekkyzy¹, Berdibay Turlybekov², Nurgeldi Uali³, Meruyert Seitova² & Madina Akeshova⁴

¹Department of Aviation English, Civil Aviation Academy, Almaty, Republic of Kazakhstan

²Department of Foreign Languages Teaching, Khoja Akhmet Yassawi International Kazakh-Turkish University, Turkestan, Republic of Kazakhstan

³Department of Speech Culture, Institute of Linguistics named after Akhmet Baitursynuly, Almaty, Republic of Kazakhstan

⁴Department of Languages, International University of Tourism and Hospitality, Turkestan, Republic of Kazakhstan

Correspondence: Zaure Badanbekkyzy, Department of Aviation English, Civil Aviation Academy, 050039, 44 Akhmetov Str., Almaty, Republic of Kazakhstan. E-mail: zaurebadanbekkyzy31@gmail.com

Received: May 23, 2023

Accepted: August 28, 2023

Online Published: October 20, 2023

doi:10.5430/wjel.v13n9p2

URL: <https://doi.org/10.5430/wjel.v13n9p2>

Abstract

The relevance of the study lies in the fact that today one of the problems of linguistics is the comparative study of languages. Comparative study of unrelated languages makes it possible to identify features of linguistic phenomena that are barely noticeable when studying one or another language separately. These features, along with the formation of the image of a typological structure, cover both the entire language and the study of its individual parts. The purpose of the study is to analyze the effectiveness of a comparative study of the phonetic features of the language structures of the Kazakh and English languages. To achieve the research goals, the following methods were used: functional, communicative, and comparative. The starting point of training is the explanation of the role of pronunciation in the overall process of formation and perception of speech. The article emphasizes the importance of the comparative study of languages of different structures in the field of phonetics. It is described that the sounds of the language are not pronounced separately, but are used in combination with each other within a word or between words and mutually sequentially. The results of the work determined that both in Kazakh and English, sounds in the composition of words or between them influence each other and are pronounced consonantly, and questions of sound extraction play an important role in teaching speaking skills, as well as in other types of language communication. It seems necessary to enrich the repertoire of techniques used in phonetic didactics by popularizing comparative methods. Given that knowledge of the elements of phonetics is an integral part of language learning, the practical significance lies in the fact that the study can be essential in the process of preparing a productive comparative study of the English and Kazakh languages in the context of phonetics.

Keywords: comparative research, teaching, Kazakh and English languages, sounds, influence, assimilation.

1. Introduction

In the field of phonetics, a long tradition of comparing languages dates back to the 19th century, when the comparative study was initiated by the linguists F. Bopp (1979) and P. Urbanik (2021), who emphasized the need to compare different data. These descriptive tendencies materialized and confirmed the coexistence of the standard and many other pronunciations, insisting on the need for language indications, which became an important area of comparative study, including the phonetics of pronunciation, the composition of the phonemic system, and speech flow. With regard to segmental phonology, the basic comparative aspect can be considered as a transition between the variability of sound realizations, due to attempts to reproduce the pronunciation of the words of the language being studied, and its stabilization, more or less close to the phonological structure. No natural language makes full use of all possible phonetic differences. If the essential difference between consonants and vowels occurs in all languages of the world, then many other conceivable differences are subject to language-specific selection. Professor S. Sabol (2003) in his scientific work notes that at one time the famous scientist Akhmet Baitursynov showed 28 sounds in the Kazakh language. According to the sound paradigm, the scientist distinguished 9 vowels and 19 consonants. Corresponding differences in language give rise to categories of sounds called “phonemes”.

Language is the main tool of human communication, and its development is closely related to the development of phonemic culture and origin, so it is important to consider comparative study as one of the important stages of linguistics. Linguistics as a science of language has its own unique laws and theories in the field of phonetics, so the main task is to investigate its patterns and changes (Berkimbaev et al., 2013). Historically, linguistics allows you to study the history of languages, focusing on phonetic, semantic, and syntactic evolution. Moreover, later studies by I.L. Bim (2013) and A. Schweitzer (2019) point to the influence of a speaker's speech diversity and how he classifies perceptual categories, which are partly determined by articulatory habits, where classical linguistic methods are based on a careful two-way comparison of two languages. Thus, they seek to highlight strict and regular rules regarding the evolution of sounds between two languages, that is, changes in pronunciation that are constantly observed in phonetically identical environments. The sound

sequence is segmented into lexical units, classified on the basis of their morphology, and these lexical units are combined into sentence units, which gradually converge with the structures of the target language if the learning process occurs regularly.

The Anglo-Kazakh phonetic contrast is an integral part of the study, since although the languages belong to different language families, from the point of view of phonetics they can be distinguished by the material properties that make up the elements of the speech flow. English belongs to the Germanic branch of the Indo-European language family. More specifically, English belongs to the West Germanic group of Germanic languages. Kazakh belongs to the Turkic language family, which is a separate language family from Indo-European. Within the Turkic family, Kazakh belongs to the Kipchak branch (Nurtazina and Toktushakov, 2017). The phenomenon of speech intonation exists in both English and Kazakh languages, and they have much in common. Studying the phonetic contrast between languages as different as English and Kazakh is invaluable because for native speakers of one language who are trying to learn the other, understanding the phonetic differences can be a significant help in mastering pronunciation and improving listening skills (Naka and Spahija, 2022). For example, sounds that exist in Kazakh but not in English (or vice versa) can be particularly challenging for learners. Identifying these differences from the outset can make the learning process smoother. Relevant units, considered as sets of distinctive features, appear in phonemic oppositions and are identified at every level of phonetic-phonological analysis, including phonemes and their groups, syllables, words and word stress, rhythmic groups, and the utterance as a whole, including the stressed utterance. Phonetic-phonological analysis, including phonemes and their groups, syllables, words, word stress, rhythmic groups and the whole utterance, intonation and all kinds of phonetic modifications resulting from the reduction, exclusion and assimilation of vowels in connected speech. An explanation of the place of phonetics in the system of languages, and the role it plays in the general language process of speech production and perception, gives a complete picture of the phonetic system as an objective reality even before studying its fragments, which makes studying in a comparative context easier and more effective. The need to study the current topic allows us to determine that phonetics emphasizes the particular importance of simultaneously teaching sounds and their stability, as a factor in the self-identity of the phonetic system, and variability, as a way of its existence (De Leeuw and Celata, 2019).

The purpose of the study is to analyze the effectiveness of a comparative study of the phonetic features of the language structures of the Kazakh and English languages.

Comparative phonetic studies between languages with stark structural differences, such as English and Kazakh, present a unique and novel opportunity in linguistic research. Kazakh and English both possess sounds that are not present in the other language. Investigating these phonemic differences can offer insights into how such sounds evolved and their roles in language structure.

2. Materials and Methods

The methodological basis of the study was the following approaches to the study of this topic: functional, cognitive, and comparative. The functional method made it possible to consider phonetic linguistics as a static system, emphasizing its dynamic nature, which carefully distinguishes the description of the state of the language, all its variations, and fluctuations, understood at the moment, in the description of its evolution. The presentation of the functional analysis shows that the system of the Kazakh and English languages is a fairly simple theoretical framework designed to describe them. The module aims to understand what a comparative study is, and what ultimate goal it pursues. This approach also led to the understanding that the construction of a phonetic system with different structures is part of the study, which includes several stages. In the aspect of a functional tool, the content of languages begins with an analysis of the existing situation, transcription, and formalization. Language learning is established on the basis of strict logical derivation and is limited to the study of phonemic structures in such a way that the rules of human language are considered a limited set.

The communicative approach emphasized the intellectual role of comparative study, understanding the rules of grammar and phonetics. It focuses on meaningful exercises and pays attention to enthusiasm. All these practices are concrete manifestations of the views on language that modern linguistics holds and stands in opposition to formalistic linguistics, believing that the study of language cannot consider only form and structure. The current method emphasizes the social and functional nature of language and considers that its main function is communication, and language studies should pay attention to the use, meaning, and function of language, as well as the relationship between language and society. Under the influence of this view, the communicative nature of the comparative process is considered, which suggests that the main goal of the study is the development of social abilities. Communicative typology emphasizes the dialectical relationship between linguistic community and individuality and considers that behind a complex language there are consistency and generality. It is in the context of phonetics that the communicative paradigm helps to consider the physical properties of speech, the ways of pronouncing a person, as well as the physiological process of speech perception during a comparative analysis of languages with different structures.

The comparative method is a set of research methods in comparative linguistics that linguists use to identify the origin and flow of relationships between languages. His task was to demonstrate and generalize the rules of phonetic comparison of words by comparing unrelated languages and to draw a conclusion about the phonetic evolution of a number of rules used to reconstruct linguistic elements. The comparative study of unrelated languages is indispensable in linguistics. Not only does it help to identify unique features and phenomena of individual languages, but it also contributes immensely to our understanding of typological structures, the components of language and the cognitive processes that underlie them. Such studies provide a clearer, more holistic picture of human linguistic capacity and evolution. Comparative studies in linguistics hold paramount importance, especially when it comes to understanding typological structures and dissecting language components. The comparative approach made it possible to compare the phonemes and sound systems

of two languages – Kazakh and English, based on contrast analysis. Given the similarities between the two phonological systems, common or close sounds have been used to improve and correct certain articulations. In addition, when comparing the phonetics of the English and Kazakh languages, most of the research is aimed at studying the structural relationships between unrelated languages, clarifying their features, advantages, and disadvantages. The current analysis is based on the principle of natural sound changes, according to which any change in the sound of a language over time is natural without exception. Languages, in this case, were analyzed using comparative mechanisms to determine what features they have in terms of phonetics.

3. Results and Discussion

The Kazakh language is very rich in vowels and cannot be represented by open, equidistant, and combined letters only in Arabic or Persian, so the Kazakh alphabet system gradually changed from consonant phonemes to full phonemic letters. The Kazakh script, which is presented in the Arabic-Persian alphabet, is basically an improved version. The current Kazakh Arabic-Persian alphabet consists of 29 letters and a special character – haimuzai, which is a sign of vowel harmony, and usually appears at the beginning of a word, indicating that the vowel in the word is a front vowel, if the word has [k], [g], [e]. Therefore, in his scientific work, K.B. Beisembiev (1978) notes that the Kazakh alphabet has many unique features that differ from both Arabic and Persian. Cyrillic Kazakh is currently spoken in Kazakhstan and the Mongolian province of Bayan-Ulgii, although Kazakh speakers in Central Asia and Russia also use it. This alphabetic system is not static and was largely not finalized until the mid-20th century (Stevens, 2020). Although the Kazakh Khanate was destroyed in 1847, it took the Russian Empire more than two decades to fully replace its dominance. The gradual penetration of the Russian authorities into the field of vision of the Kazakhs made it possible to introduce the Cyrillic alphabet. The famous educator Ibray Altynsarin was the first to introduce the Cyrillic alphabet for writing the Kazakh language, thus introducing not only the Russian script but also the Russian educational system and the idea of culture (Doszhan, 2023). Altynsarin's own efforts to create a Kazakh grammar book and a Kazakh-Russian dictionary laid the foundation for modern Kazakh literature and linguistics, and the introduction of the Cyrillic alphabet provided a unified system that was crucial for the creation of textbooks and academic materials. Despite the Cyrillic script's foreign origins, its adoption helped in preserving and promoting Kazakh folk tales, songs, and literature. Works that had been orally passed down through generations could now be written, read, and disseminated more widely (Toktagazin et al., 2016).

The English language, has gone through several different periods of development and has more than 1500 years of history. The language pronunciation of English is constantly changing, which makes the English branch very obvious, and the English of different countries and regions is very different (Strickland and De Cruz, 2021). Considering the constant phonetic changes in the example of the English language, one can get a more intuitive idea of its development from ancient times to the present day, which is more conducive to the development of comparative study in the world. Modern English basically transformed from Middle English during the Renaissance (from 14th to 17th century). In the evolution of English phonetics, there are relatively clear changes in vowels, and the main manifestation of this change is the increase in the position of the tongue in the pronunciation of vowels. Among them, the seven long vowels undergo the most obvious changes: their pronunciation skills approach from the tip of the tongue to the base, and the degree of opening decreases. For example, the vowel [a] has a clear increase in pronunciation position (Haspelmath, 2019). When pronouncing the vowel [e], the position of the tongue shifts forward and the degree of opening gradually decreases, forming a sound similar to [i]. The corresponding syllable is added in front, similar to the pronunciation of [ai]. Middle English long vowels also change with vowel change, which also gradually separates English pronunciation and English spelling.

The meaning and content of sounds in English and Kazakh languages are special in their comparative study (Table 1). They are usually quite regular and can be formulated as rules that predict the use of certain allophones in each position. Sound modifications are observed both inside words and at their boundaries (Hornstein, 2019). To characterize consonants and vowels in modern English, various types of sound modifications are used. There are the following types of modification: assimilation, accommodation, reduction, elision, and insertion. This is a partial adaptation, harmony, coherence, and contact of phonemes within a word or between words, depending on their pronunciation. It is known that the process in which one of the neighboring consonants in a word or between words affects another is called assimilation. The three types of assimilation can lead to different changes in the location of the joint, the mode of movement and the strength of the articulation. In this regard, three types of assimilation are distinguished in English – complete, partial, and medium, and in Kazakh, there are two of them – complete and partial assimilation. If two sounds become exactly the same or merge into one another, this is called complete assimilation (Moran et al., 2021). For example, in English: “horse”-“shoe” [hɔ:ʃu:]. The sound [s] in the word “horse” [hɔ: s] changes to [ʃ] under the influence of the sound [ʃ] in the shoe. And in the Kazakh language, the words “жазса” (jazsa), and “басшы” (başşy) are pronounced in the form of [жасса] (jassa), and [башшы] (başşy). The last of the neighboring sounds in these words [c] (s), [ш] (ş) affect the sounds preceding them [z], [ş]. Sonorants [w, l, r] in English words “sweet” [swi:t], “place” [pleis], “try” [traɪ] partially harden under the influence of [p, t, k, s, f, θ] after voiceless consonants. The average type of assimilation in English is between full and partial assimilation. The assimilated consonant has a different variety, which is not fully assimilated under the influence of the preceding consonant. For example, the sound [s] in “gooseberry” [gʊzbəri] changes to [z] under the influence of the consonant [b]; the consonant [n] in “congress” [kɒŋɡres] changes to the consonant [ŋ] under the influence of [g].

Table 1. Comparison of Kazakh and English languages by the number of letters, phonemes, and the degree of entropy for the initial letter (the lower the entropy, the more correct and consistent spelling)

Language	Letters	Phonemes	Degree of entropy of the initial letter
Kazakh	43	28	0.85
English	26	44	0.83

In English, in the direction of sound modification, assimilation is divided into: progressive: “dogs” – voiced [z], “cats” – deaf [s]; regressive: [t], [d] becomes dental before [ð], [θ]: “eighth”, “at the”, “said that”, “with”; reciprocal: [t], [d] becomes transalveolar before [r]: “tree”, “true”, “dream”, “the third room”, where [r] is partially voiced. Progressive influence is the articulatory effect of the first sound in one word or between several words on the next sound after articulation (Dabboub, 2019; Rahimi, 2021). Depending on the type of consonant, the progressive effect in both languages is as follows. In English: the phoneme [t] in the words “start” [stɑ:t], “stone” [stəʊn] loses its voiceless feature under the influence of the phoneme [s]. The consonants [t], [d] and [n] become lip sounds before the two-lip phonemes [p], [b], [m]. For example, “he’s a rather fat boy”; “he’s a very good boy”; “there are ten men”. The phoneme [t] affects the consonant [k] when it precedes the phonemes [k] and [g]. For example, “where that cat has been all day?”, “Can you see that girl over there?”. The phoneme [d] affects the consonant [g] when it precedes the phonemes [k] and [g]. For example, “it was a good concert”; “she’s a very good girl”. The pronunciation of the plural form of the noun -s changes depending on the influence of the consonant before it (Hornstein, 2019). Pronounced as [z] under the influence of voiced consonants. For example, “calls” [kɔ: lz], “pens” [penz]. Pronounced as [s] under the influence of voiceless consonants. For example, “books” [bʊks], “desks” [desks]. In the Kazakh language, with progressive assimilation influence, if the last sound of the root word is a voiced consonant [з] (z), the initial consonant of the affix attached to it is often a voiced consonant. For example, жаз + ға (jaz + ğa) = [жазға] (jazġa), сөз + дік (cöz+dik) = [сөздік] (cözdik).

Under the influence of the first voiceless sound, the next voiced sound becomes a voiceless phoneme. For example, in the process of speaking under the influence of a deaf phoneme in the Kazakh language, if the last sound of the root is deaf or strong, then the first consonant of the suffix attached to it is also a deaf or strong sound: қап + қа (qap + qa) = [қапқа] (qapqa), күміс + тен = [күмістен] (kümisten). Under the influence of the first voiceless sound, the next voiced one becomes a voiceless phoneme (Berry et al., 2019). For example, in the phrase “алып бер” (alyp ber), under the influence of the first deaf [п] (p) in the process of speaking, the voiced [б] (b) becomes a deaf sound [п] (p). If the last sound of the root is [ш] (ş), and the first sound of the suffix is [с] (s), then in a speech this suffix sound becomes [ш] (ş), but the sound [с] (s) does not change in spelling. For example, іш + сін (ış + sin) = [ішшін] (ışşın), қаш + са (qaş + sa) = [қашша] [qaşşa], шаш + са (şaş + sa) = [шашка] (şaşsa).

The process when the second of two neighboring sounds influences the first and likens it to itself is called regressive assimilation (Giraldo, 2019). In English, for example, the phoneme [n] in the word “tenth” [tenθ] changes to the sound of an alveolar sound under the influence of the phoneme [θ]. Sometimes adjacent phonemes influence each other and change both sides of the pronunciation. For example, if the sound [t] in the word “twin” [twin] changes to a labial sound, the phoneme [w] becomes partially voiced. With other types of assimilation, phonemes undergo a qualitative change (Levi and Inbar-Lourie, 2020). In the Kazakh language, if the sound [н] (n) in the Kazakh language precedes labial sounds, such as “көңбе” (könbe), “Жанпейіс” (Janpeiis), in pronunciation it changes to the two-lipped sound [м] (m), [көмбе] (kömbe), [Жампейіс] (Jampeiis). If the last root sound [н] (n) is before the phonemes [к] (q), [ғ] (ğ), then the consonant [н] (n) in pronunciation changes to the sound [ң] (ŋ), but this is not taken into account in spelling. For example, “бір күңгі” (bir küngı) = [bir küŋgı], “сәнқой” (s äŋqoi) = [s äŋqoi], “Аманкүл” (Amankül) = [Amaŋgül], “Дүйсенғали” (Düisenġali) = [Düisenġalı]. If one of the root phonemes [с] (s), [з] (z) comes before the sound [ш] (ş), then both of them become the sound [ш] (ş) when pronounced. When writing, it is not taken into account, for example, “жұмысшы” – [jūmysşy]. If the root of the sound [з] (z) comes before [с] (s), then in pronunciation it is pronounced as [с] (s). Spelling doesn’t take this into account. For example, “көз сал” (k öz sal) = [көссал] (kössal), “түзсыз” (tüzsyz) = [түссыз] (tüssyz), “жазса” (jazsa) = [жасса] (jassa). If the last sound of the first word is [з] (z), and the next word begins with a phoneme [ж] (j), then [з] (z) is pronounced as a consonant [ж] (j). However, the root of the word is preserved, for example, “Оразжан” (Orazjan) = [Оражжан] (oraġjan), “Боз жігіт” (Böz jıgıt) = [божжігіт] (bojjıgıt).

It is also worth mentioning the double or reciprocal assimilation influence of the English language on the Kazakh languages (Kremmel and Harding, 2019). Reciprocal assimilation is the interaction of two sounds in the same word. For example, the sound [r] in the word “tree” [tri:] is partially voiceless under the influence of the voiceless phoneme [t], while the alveolar [t], on the contrary, is pronounced behind the alveoli under the influence of the sound [r]. Similarly, the sonorant sound [w] in “twenty” [twenti], “quick” [kwık] is partially harden under the influence of [t] and [k], so the phonemes [t] and [k] become variants of the labial sound under the influence of [w]. In the Kazakh language, if the sound [н] (n) precedes the lip sounds “көңбе” (konbe), “Жанпейіс” (Janpeiis), then in pronunciation it changes to the lip sound [м] [көмбе] (kombe), [Жампейіс] (Jampeiis). If the phonemes [к], [ғ], [ғ], [к] are preceded by the last [н] (n) sound of the root, then the consonant [н] (n) in pronunciation changes to the sound [ң] (ŋ), but this is not taken into account when writing (Riehl, 2020). For example, “бір күңгі” (bir küngı) = [bir küŋgı], “сәнқой” (s äŋqoi) = [s äŋqoi], “Аманкүл” (Amankül) = [Amaŋgül], “Дүйсенғали” (Düisenġali) = [Düisenġalı].

If the phoneme [ш] (ş) is preceded by one of the last root phonemes [с] (s), [з] (z), then both of them become the sound [ш] (ş). In spelling, this is not taken into account, for example, “жұмысшы” (jūm üşşı) = [жұмышшы] (jūmysşı), “сөзшен” (sözşen) = [сөшшен] (söşşen), “жұмыс шамасы” (jūmys şaması) = [жұмыш шамасы] (jūmys şaması), “бос шылбыр” (bos şylbyr) = [бошшылбыр] (boşşylbyr). When the last root of the sound [з] (z) precedes the phoneme [с] (s), then in pronunciation it is pronounced as [с] (s), and the spelling is not taken

into account (Berry et al., 2019). For example, “көз сал” (köz sal) = [көссал] (kössal), “түзсыз” (tūzsyz) = [түссыз] (tūssyz), “жазса” (jazsa) = [жацца] (jassa). If the last sound of the first word is [з] (z), and the next word begins with [ж] (j), then the sound is pronounced as the consonant [ж] (j), but the root of the word is preserved. For example, “Оразжан” (Orazjan) = [Оражжан] (orajjan), “Боз жігіт” (Boz жігіт) = [Божжігіт] (bojjігіт). Adjacent consonants in a word or between words affect each other, and changes to either side of them have a crossover effect. Spelling does not take this into account (Sultana, 2019). For example, consonants [с] (s), [ж] (j) in the words “Досжан” (Doşjan) = [Дошшан] (doşşan), “Есенкелді” (Esenkeldy) = [Есеңгелді] (eseңgeldi), “бес жан” (bes jan) = [бешшан] (beşşan) under the influence of each other [с] (s), [ж] (j) changed into the sound [ш] (ş), [н] (n) and [к] (k) into [ң] (ñg).

Currently, scientists are trying to distinguish between variants and variations of sounds in the paradigmatic system of the Kazakh and English languages. Comparing languages with distinct phonetic systems can be both challenging and illuminating. The juxtaposition of languages with different sound systems provides researchers with the opportunity to delve deeper into the vast intricacies of human speech, but it also poses certain difficulties. Different languages might have sounds that the other lacks. This discrepancy can make direct comparison difficult, as there isn't always a one-to-one correspondence between phonemes. Beyond individual sounds, languages can have distinct patterns of stress, tone, or intonation (Sapargaliyeva et al., 2020). These features can be especially challenging to compare and analyze across languages with very different prosodic systems. Researchers, especially if they are native speakers of one of the languages being compared, might have perceptual biases. They might unconsciously give prominence to sounds or features that are salient in their native language. Professor at the University of London and specialist in English phonetics J.C. Wells (2006) says that in the process of evolution there are also monophonic sounds that have changed a lot. [I] and [i] are pronounced the same, and the position of the tongue is close to the middle, where the degree of disclosure is partially increased. The sliding process of the triphthong gradually decreases with the change, the pronunciation [oy] changes to [ay], and another example [y] is replaced by [v]. With the gradual development of modern English, a number of changes in the pronunciation of vowels show that the pronunciation position is closer to the middle than in Middle English. Generally speaking, the lingual position of the front vowels in English is generally decreasing, while the final vowels are generally rising, and the position of the tongue tends to move towards the middle. The intonation problem for the professor is a common problem among English learners. It can be traced back to the root cause. The reason for this error is that the students did not learn the correct way of pronunciation at a young age, and this problem was not addressed in the later learning process (Tusseyev et al., 2021). Another important factor is the lack of pronunciation of some syllables in English, given Kazakh, which leads to some students making mistakes in pronunciation during long-term learning, especially in the pronunciation of many vowels where there is no uniformity. And vowels are key points of pronunciation in syllables, which leads to inadequate or even incorrect pronunciation imagination in English learners.

M. Zheretoyul (2018), in turn, argues that differences in the Kazakh language in phonetics, vocabulary, and grammar can exist between regions within the dialect area, so the dialect can be divided into several subdialects, and residents of different cities can speak different native languages. Often there are regular correspondences between various phonetic phenomena. The vocabulary and grammar of a common language rely on the entire main dialect as its main source, but its phonetic system can only be the phonetic system of one place within the area of the main dialect, where it is neither appropriate nor necessary to mix other phonetic systems. In addition to the fact that the base dialect is based on vernacular, the common language also incorporates linguistic components from other dialects and languages that are directly or indirectly related to the nation. In addition, the common language also absorbs the words it needs from special political, scientific, and professional terms. There is no necessary connection between the phonetic form and the meaning of linguistic symbols in terms of natural features, and the relationship between them is conditional. When different languages or dialects refer to the same phenomenon, the meanings of the symbols are roughly the same, but their phonetic forms are quite different. This shows that there is no natural connection between phonetic form and meaning in language. The phonetic evolution of language in history proves more directly that a known meaning does not necessarily correspond to a certain phonetic form, and there is no permanent and inevitable connection between the meanings.

According to V.V. Evdokimova, M.V. Petrov, and M.A. Klyueva (2021), opposition and addition are two important relations between sounds in a language, which are the basis for effective comparative study. Opposite phonemes play the role of distinguishing phonetic forms of words, and similar and complementary phonemes can be used by linguistic societies as the same phoneme. When a phoneme is connected to a phoneme, as well as due to the influence of neighboring sounds, or due to differences in the speed, pitch, and power of speech, various changes can occur, which are called the flow of speech. Common speech changes include assimilation, alienation, weakening, and falling away. Different phonemes that can appear in the same phonetic environment, if their differences make it possible to distinguish phonetic forms and meanings of words, are opposite relations. Several phonemes in opposite relationships have the function of distinguishing meanings, so during induction, they should be classified into different phonemes, respectively. Each of them has its own medium of appearance, and they never replace each other in the same speech medium. Several phonemes that are in an additional relation can merge into several conditional variants of one phoneme. Several phonemes that are in an additional relationship can be grouped into one phoneme only if the phonetics are similar. If the sound quality is too different, even if they complement each other, they cannot be combined into one phoneme. To date, Professor N.M. Uali (2021) is the first scientist to identify variants of sounds in this paradigm. He says that the word “хатшы” (hatşy) = [хатчы] (hatchy) has a variant [тч] (tch), and “ұятсыз” (ūiatsyz) = [ұятцыз] has a variant [тц] (tc).

This fact emphasizes that languages develop under the influence of external and internal factors, and the latter directly affect linguistics. Phonetic changes, both spontaneous and conditioned, are characterized by regularity, due to which they have long been described in patterns that modern linguistics tends to question. Articulatory habits “encode” sound information according to the phonological system of the speaker's language, resulting in a phonologically inaccurate interpretation of sounds. In turn, the pronunciation of the target language, which

contains a large number of lingual traces, may represent some kind of interference, where partial mastery of articulatory skills may have more serious consequences in a social environment characterized by the presence of negative stereotypes. The sound element can perform, in his opinion, a distinctive function, and phonic facts can take on the function of comparison, helping to segment the speech chain. The formulation component processes the planning product and assembles it into a language form. This includes separate lexical, grammatical, and phonological operations that seem to be relatively independent, but the exact relationship of which has not been fully elucidated (Razavipour and Raji, 2022).

Considering factors like dialectal variations, language contact, and sociolinguistic contexts is crucial in linguistic research and language-related fields. The significance of these factors is intertwined with the dynamic nature of language as it evolves, adapts, and interacts with its sociocultural surroundings. Dialects often align with regional or social groupings, giving insights into a community's history, migrations, and social stratifications (Zhanysbayeva et al., 2021). Even within a single language, there can be substantial diversity in pronunciation, vocabulary, and even grammar. Understanding these variations can help linguists grasp the full richness of a language. Recognizing dialectal differences is crucial in formulating language policies and educational programs, ensuring they are inclusive and effective (Sadvakassova et al., 2022). Some dialects, especially those spoken by smaller communities, may be endangered. Identifying and documenting them is the first step in preservation efforts.

Studying the phonetic contrast between languages as distinct as English and Kazakh is immensely valuable. For native speakers of one language trying to learn the other, understanding the phonetic differences can significantly aid in mastering pronunciation and enhancing listening skills. For instance, sounds that exist in Kazakh but not in English (or vice versa) can be particularly challenging for learners. Identifying these differences from the outset can make the learning process smoother.

In real-time, the study of the phonetics of the English and Kazakh languages did not attract the attention of most researchers, which shows the unawareness of the value of phonetics in the comparative study of current languages. If this problem is not solved, it will bring big problems in the subsequent learning of languages. In turn, the application of phonetic knowledge has enriched research in the field of phonetics. Finally, a significant factor in the recent expansion is due to the desire of the language sciences to now approach linguistic phenomena in their entire cognitive domain and to expand the study of language into the study of user usage and behavior. The phonological system of a language is like a sieve through which everything that is said passes. In the sieve, only sound features related to the individualization of phonemes remain. All other sound signs that have a calling value are characterized by the expression of the speaking subject. The difficulty in studying comparative linguistics lies mainly in the fact that languages do not develop independently of each other, since borrowings can occur, consisting of words from other languages, which tend to confuse linguistics. Moreover, if it is reasonable to work on languages to establish correspondences between sounds, it is much more difficult to be interested in the possible filiation of recovered mother languages. Indeed, the lack of precise knowledge of these proto-languages severely limits the work of linguists.

4. Conclusions

As a result of the study, it was possible to find out that some features of linguistic phenomena are barely noticeable when studying and teaching a particular language separately. The importance of the comparative study of languages of a different structure in the field of phonetics is emphasized. It is described that the sounds of the language are not pronounced separately, but are used in combination with each other within a word or between words and mutually sequentially. In Kazakh and English, sounds in the composition of words or between words influence each other and are pronounced harmoniously with each other. Structural linguistics emphasizes the importance of substitution, the opposition of sounds, and minimal pairs. Thus, all sorts of exercises were developed to distinguish and identify phonemes or words. The correct pronunciation of English and Kazakh languages, as a tool for international communication in a globalized world, allows you to establish contacts and prevent misunderstandings. An important role in the glottodidactic process is played by the creation of conditions that minimize difficulties in mastering the correct pronunciation. This is especially important in the initial period of training, when, due to a rational didactic and methodological approach, it is possible to prevent the emergence of inappropriate articulation skills, which are very difficult to eliminate at later stages of training.

In conclusion, it can be noted that a comparative study of the factors of unrelated languages in the field of phonetics makes it possible to understand the features of linguistic phenomena, to highlight the differences and similarities between them, noticeable in the individual study of a particular language. When studying linguistic facts between two languages, English and Kazakh, the use of comparative analysis in different systems allows you to fully and deeply identify their differences and similarities, clearly understand the features and patterns of linguistic phenomena, and look deeply into the structure of the language. It seems that in the comparative study of English and Kazakh languages, it is necessary to pay attention to the phonetic factor. Thus, the comparative study makes it possible to reconstruct phonological evolution with a temporal depth of several centuries, predict future changes, and provide systematic criteria for dialect subgroups. Comparative law can be a complex and lengthy process, and sometimes an educated guess is the best conclusion one can come to. However, for linguistic historians, a comparative study is an indispensable tool that is responsible for almost all currently accepted linguistic genealogies. Exploring the vast landscape of phonetics and its interplay with other linguistic and sociolinguistic phenomena opens up numerous areas for investigation. Delving deeper into these areas not only enhances our understanding of phonetics as a standalone field but also reveals its intricate connections to other aspects of language and society. For instance, studying how these borrowed sounds integrate into a language's phonetic system can be enlightening.

Acknowledgments

Not applicable

Authors contributions

All authors made an equal contribution during the study.

Funding

This work was supported by the Ministry of Education and Science of the Republic of Kazakhstan within the framework of the scientific project AP09261132.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Beisembiev, K. B. (1978). *Essays on the history of socio-political and philosophical thought of Kazakhstan: pre-revolutionary period*. Almaty: Publishing House Kazakhstan.
- Berkimbaev, K. M., Niyazova, G. Z., Kerimbaeva, B. T., Berdi, D. K., & Ernazarova, D. Z. (2013). The formation of information competence of future specialists - As a factor of improvement of quality of preparation. *Life Science Journal*, 10(SPEC. ISSUE 9), 198-202.
- Berry, V., Sheehan, S., & Munro, S. (2019). What does language assessment literacy mean to teachers? *ELT Journal*, 73(2), 113-123. <https://doi.org/10.1093/elt/ccy055>
- Bim, I. L. (2013). *Theory and practice of teaching foreign languages: traditions and innovations*. Moscow: Tezaurus.
- Bopp, F. (1979). Analytical comparison of the Sanskrit, Greek, Latin, and Teutonic languages. *Tijdschrift Voor Filosofie*, 41, 712-715.
- Dabboub, A. E. (2019). *The effectiveness of comprehensive corrective feedback-direct and indirect- on EFL learners' language accuracy, structural complexity and lexical diversity*. Nottingham: Trent University.
- De Leeuw, E., & Celata, C. (2019). Plasticity of native phonetic and phonological domains in the context of bilingualism. *Journal of Phonetics*, 75, 85-93. <https://doi.org/10.1016/j.wocn.2019.05.003>
- Doszhan, R. (2023). Multi-vector cultural connection in the conditions of modern globalisation. *Interdisciplinary Cultural and Humanities Review*, 2(1), 27-32. <https://doi.org/10.59214/2786-7110-2023-2-1-27-32>
- Evdokimova, V. V., Petrov, M. V., & Klyueva, M. A. (2021). Deep learning-based video stream reconstruction in mass-production diffractive optical systems. *Computer Optics*, 45(1), 130-141. <https://doi.org/10.18287/2412-6179-CO-834>
- Giraldo, F. (2019). Language assessment practices and beliefs: implications for language assessment literacy. *HOW Journal*, 26(1), 55-61. <https://doi.org/10.19183/how.26.1.481>

- Haspelmath, M. (2019). *Can cross-linguistic regularities be explained by constraints on change? Competing explanations in linguistic typology*. Berlin: Language Science Press.
- Hornstein, N. (2019). *The stupendous success of the minimalist program*. Berlin: De Gruyter. <https://doi.org/10.1515/9783110540253-007>
- Kremmel, B., & Harding, L. (2019). Towards a comprehensive, empirical model of language assessment literacy across stakeholder groups: developing the language assessment literacy survey. *Language Assessment Quarterly*, 17(1), 113-120. <https://doi.org/10.1080/15434303.2019.1674855>
- Levi, T., & Inbar-Lourie, O. (2020). Assessment literacy or language assessment literacy: learning from the teachers. *Language Assessment Quarterly*, 17(2), 168-182. <https://doi.org/10.1080/15434303.2019.1692347>
- Moran, S., Grossman, E., & Verkerk, A. (2021). Investigating diachronic trends in phonological inventories using BDPROTO. *Lang Resources and Evaluation*, 55, 97-103. <https://doi.org/10.1007/s10579-019-09483-3>
- Naka, L., & Spahija, D. (2022). Impact of english language as a human capital in the higher education institutions' development strategy. *Corporate and Business Strategy Review*, 3(2 special issue), 262-272. <https://doi.org/10.22495/cbsrv3i2siart7>
- Nurtazina, R., & Toktushakov, A. (2017). Internal migration in central Asia: Social risks (case studies of Kazakhstan, Tajikistan, and Kyrgyzstan). *Central Asia and the Caucasus*, 18(4), 46-56.
- Rahimi, M. (2021). A comparative study of the impact of focused vs. comprehensive corrective feedback and revision on ESL learners' writing accuracy and quality. *Language Teaching Research*, 25(5), 699-710. <https://doi.org/10.1177/1362168819879182>
- Razavipour, K., & Raji, B. (2022). Reliability of measuring constructs in applied linguistics research: a comparative study of domestic and international graduate theses. *Lang Test Asia*, 12, 16-25. <https://doi.org/10.1186/s40468-022-00166-5>
- Riehl, C. M. (2020). Multiliteracy in heritage language speakers – the interdependence of L1 and L2 and extra-linguistic factors. *The Heritage Language Journal*, 17(3), 394-408. <https://doi.org/10.46538/hlj.17.3.4>
- Sabol, S. (2003). *Akhmet Baitursynov, Russian colonization and the genesis of Kazak national consciousness*. London: Palgrave Macmillan. <https://doi.org/10.1057/9780230599420>
- Sadvakassova, N., Karmanova, Z., & Bobrova, V. (2022). Pedagogical Conditions for Managing Stressful States of Preschool Children with Special Educational Needs. *Mind, Brain, and Education*. <https://doi.org/10.1111/mbe.12345>
- Sapargaliyeva, A. Z., Muratbekova, D. Y., Aralbaeva, R. K., Zhakipbekova, S. S., & Shynybekova, A. S. (2020). Professional training of future teachers for the development of speech activity of younger schoolchildren. *Journal of Intellectual Disability - Diagnosis and Treatment*, 8(3), 358-369. <https://doi.org/10.6000/2292-2598.2020.08.03.12>
- Schweitzer, A. (2019). Exemplar-theoretic integration of phonetics and phonology: detecting prominence categories in phonetic space. *Journal of Phonetics*, 77, 12-20. <https://doi.org/10.1016/j.wocn.2019.100915>
- Stevens, C. (2020). Russia–Kazakhstan Relations in the Early Post-Soviet Era: Explaining the Roots of Cooperation. *Europe-Asia Studies*, 72(2), 1-33. <https://doi.org/10.1080/09668136.2020.1719979>
- Strickland, B., & De Cruz, H. (2021). Editorial: replicability in cognitive science. *Review of Philosophy and Psychology*, 12(1), 2-7. <https://doi.org/10.1007/s13164-021-00531-y>
- Sultana, N. (2019). Language assessment literacy: an uncharted area for the English language teachers in Bangladesh. *Language Testing in Asia*, 9(1), 14-20. <https://doi.org/10.1186/s40468-019-0077-8>
- Toktagazin, M. B., Adilbekova, L. M., Ussen, A. A., Nurtazina, R. A., & Tastan, T. R. (2016). Epistolary literature and journalism: Theoretical and practical aspects. *International Journal of Environmental and Science Education*, 11(13), 5833-5843.
- Tusseyev, M., Torybayeva, J., Ibragim, K., Gurbanova, A., & Nazarova, G. (2021). Ensuring the safety of learning and teaching environments. *World Journal on Educational Technology: Current Issues*, 13(4), 1029-1039. <https://doi.org/10.18844/wjet.v13i4.6299>
- Uali, N. M. (2021). Ethical concepts in the words of the edification of Abai. *Tiltanym*, 1, 3-10. <https://doi.org/10.55491/2411-6076-2021-2-3-11>
- Urbanik, P. (2021). Directives in the construction site: grammatical design and work phases in second language interactions with crane operators. *Journal of Pragmatics*, 178, 43-67. <https://doi.org/10.1016/j.pragma.2021.02.016>
- Wells, J. C. (2006). *English intonation: an introduction*. Cambridge: Cambridge University Press.
- Zhanysbayeva, A. P., Omarov, B. Z., Shindaliyeva, M. B., Nurtazina, R. A., & Toktagazin, M. B. (2021). Regional Printed Periodicals as an Important Link in the Country's Media Space. *Library Philosophy and Practice*, 2021, 1-16.
- Zheretoyul, M. (2018). Kazakh Latin alphabet and other views about the letter. *Bulletin of Kazakh National Women's Teacher Training University*, 1, 70-77.