# Understanding English Minimal Pairs of Vowel 

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#### Abstract

This research explores the importance of studying English minimal pairs of vowels and their impact on language learners' pronunciation skills. The discussion highlights the significance of differentiating vowel sounds through the analysis of minimal pairs, which consist of words sharing consonant sounds but differing in vowel articulation. By focusing on specific minimal pairs such as [i:] / [r], [æ] / [ $\Lambda$ ], [a:] / [ 0$],[\varepsilon]$, and [ p$]$, learners can refine their ability to recognize and produce the distinct vowel sounds accurately. Mastering these minimal pairs enhances phonemic awareness, enabling learners to differentiate between similar vowel sounds, thereby improving overall pronunciation accuracy. Furthermore, the study of minimal pairs contributes to word differentiation, listening skills, and spelling and reading proficiency. It empowers learners to grasp the subtle nuances in vowel pronunciation, thereby enhancing their ability to comprehend and communicate effectively in English. In conclusion, a comprehensive understanding and application of English minimal pairs of vowels are vital for language learners striving to achieve optimal pronunciation proficiency.


Keywords: Phonology, English vowel, English minimal pairs of vowel

## A. Introduction

A minimal pair is a concept in linguistics that refers to a pair of words or morphemes that differ in meaning by only one sound segment, typically a single phoneme. In other words, minimal pairs are words that are identical in form except for a specific sound or phoneme, which, when changed, alters the meaning of the word (Ladefoged \& Johnson, 2015).

[^0]The significance of minimal pairs lies in their ability to demonstrate the phonemic contrast or distinction between two sounds in a particular language. They serve as evidence that the sounds being compared are separate and meaningful units of the language. By examining minimal pairs, linguists can identify and analyze the phonological system of a language, including its phonemes, allophones, and phonemic inventory (Fromkin et al., 2013).

Minimal pairs are commonly used in phonetics and phonology to determine the presence of phonemic contrasts and to define the boundaries between different phonemes. By isolating a single sound change and observing its impact on meaning, linguists can identify the specific phonemes involved and determine their status as distinct units in the language (Yavas, 2011).

For example, in English, consider the minimal pair "cat" and "bat." The only difference between these two words is the initial consonant sound: /k/ in "cat" and /b/ in "bat." Since changing the initial sound changes the meaning of the word, /k/ and /b/ are considered separate phonemes in English (Yavas, 2011).

It is important to note that minimal pairs may vary across different languages and dialects due to phonetic and phonological differences. The identification of minimal pairs requires careful analysis of the specific language under investigation.

Studying vowel minimal pairs holds significant importance in the field of linguistics and phonetics. The analysis of vowel minimal pairs is crucial for identifying and analyzing the phonemic inventory of a language, determining which vowel sounds are distinct and meaningful. By comparing minimal pairs, researchers can identify specific vowel phonemes and their distribution within the language's sound system. Additionally, vowel minimal pairs help uncover phonological rules and processes, revealing patterns of sound alternation, assimilation, or neutralization. This knowledge deepens our understanding of the underlying structure of a language (Ladefoged \& Johnson, 2020).

Vowel minimal pairs also have practical applications. They aid language learners and teachers in developing accurate pronunciation and listening skills. By contrasting specific vowel sounds, learners can improve their ability to distinguish
between similar sounds and enhance their overall proficiency. Second language learners benefit from studying vowel minimal pairs as they can recognize and internalize the distinctions between vowel sounds in the target language, leading to improved production and perception (Ladefoged \& Johnson, 2015).

The purpose of the paper titled "English Minimal Pairs of Vowel" is to explore and analyze the distinct vowel sounds in the English language through the lens of minimal pairs. By examining minimal pairs, which are pairs of words differing in meaning by a single vowel sound, this paper aims to identify and illustrate the specific vowel phonemes present in English. The paper seeks to highlight the importance of vowel distinctions in English words, their impact on meaning, and their role in the language's phonological system. Through this analysis, the paper aims to deepen our understanding of English vowel phonetics and phonology, aiding language learners, researchers, teachers, and speech professionals in their study and application of English vowels.

## B. Research Method

The research method employed for this study was a literature review. A literature review is a systematic and critical examination of existing scholarly works and authoritative sources related to a specific research topic. It involves identifying, analyzing, and synthesizing relevant literature to gain a comprehensive understanding of the research area. The objective of this research is analyzing existing literature to identify explanation of minimal pairs of vowel.

## C. Finding and Discussion

## 1. Definition and Characteristics of Minimal pairs

The topic at hand is the definition and characteristics of English minimal pairs of vowels. In the field of linguistics, a minimal pair of vowels in English refers to a pair of words that differ in meaning solely by the vowel sound they contain. These minimal pairs are valuable in highlighting the distinct vowel phonemes in the English language and their role in conveying meaning (Tuan, 2010).

Here are the key characteristics of English minimal pairs of vowels:
a. Sound Contrast: Minimal pairs of vowels demonstrate a contrast between two different vowel sounds. Changing the vowel sound in a minimal pair alters the meaning of the word while keeping other phonetic elements constant (Bassetti et al., 2018).
b. Single Vowel Change: The minimal pairs exhibit a change in only one vowel sound, while other sounds in the word remain the same. This characteristic isolates and emphasizes the significance of individual vowel phonemes in distinguishing words in English (Maye \& Gerken, 2000).
c. Meaning Difference: The primary purpose of English minimal pairs of vowels is to showcase how vowel sounds impact the lexical meaning of words. The minimal pair exemplifies that changing a single vowel can lead to a change in word meaning, emphasizing the importance of vowel distinctions in English vocabulary (Hayes-Harb, 2007).

By studying English minimal pairs of vowels, linguists can gain insights into the vowel phonemes present in English, analyze their distribution and patterns, and better understand the phonological structure of the language. Additionally, language learners can utilize minimal pairs to improve their pronunciation and perception of English vowel sounds.

## 2. English Vowel Minimal Pairs

## a. English vowel minimal pairs : [i:] vs. [r]

English vowel minimal pairs contrasting the sounds [i:] and [r]. In English, these vowel sounds represent distinct phonemes and can be found in minimal pairs, where a change in these sounds leads to a difference in word meaning.

The vowel sound [i:] is typically represented by the letter combination "ee" or "ea" in English words. It is a long, tense vowel sound, commonly found in words like "see," "be," and "she." This sound is produced with the tongue positioned high and toward the front of the mouth, creating a narrow opening (Ladefoged \& Johnson, 2015).

On the other hand, the vowel sound [I] is typically represented by the letter combination "i" or "y" in English words. It is a short, lax vowel sound, commonly
found in words like "sit," "bit," and "hit." This sound is produced with the tongue positioned slightly lower and more centralized in the mouth compared to [i:], resulting in a more relaxed and shorter sound (Ladefoged \& Johnson, 2015).

The minimal pairs contrasting [i:] and [r] exemplify the distinction between the two vowel sounds. For instance:

1) "see" / "sit": The word "see" with [i:] means to perceive visually, while "sit" with [ I ] refers to the action of resting on a chair or seat.
2) "be" / "bit": "Be" with [i:] is a form of the verb "to exist" or "to occupy a position," while "bit" with [r] refers to a small piece or the past tense of the verb "to bite."
3) "feet" / "fit": "Feet" with [i:] refers to the plural form of the noun "foot," whereas "fit" with [I] means to be of the right size or shape.

These examples illustrate how a minimal change from [i:] to [r] or vice versa alters the meaning of the word.

Studying and recognizing the distinction between [i:] and [r] in minimal pairs is crucial for language learners and those aiming to improve their English pronunciation. It enables accurate and effective communication by ensuring the correct usage of these vowel sounds, thus enhancing overall language proficiency.

## b. English vowel minimal pairs: [æ] vs. [ $\Lambda$ ]

English vowel minimal pairs that contrast the sounds [æ] and [ $\Lambda$ ]. In English, these vowel sounds represent distinct phonemes and can be found in minimal pairs where a change in these sounds leads to a difference in word meaning.

The vowel sound [æ], often represented by the letter "a" in English words, is a short, low-mid front vowel. It is commonly found in words like "cat," "man," and "hat." This sound is produced with the tongue positioned low and forward in the mouth, creating a relatively open sound (Ladefoged \& Johnson, 2015).

The vowel sound [ $\Lambda$ ], represented by the letter " $u$ " in some words or the letter combination "uh," is a short, mid-central vowel. It is commonly found in words like "cup," "hut," and "cut." This sound is produced with the tongue positioned in a neutral,
centralized position in the mouth, resulting in a relatively relaxed and open sound (Ladefoged \& Johnson, 2015).

English vowel minimal pairs contrasting [æ] and [ $\Lambda$ ] exemplify the distinction between the two vowel sounds. Here are some examples:

1) "cat" / "cut": The word "cat" with [æ] refers to a small domesticated animal, while "cut" with $[\Lambda]$ means to divide or sever with a sharp instrument.
2) "man" / "mud": "Man" with [æ] refers to an adult male, while "mud" with [ $\Lambda$ ] refers to soft, wet earth.
3) "hat" / "hut": "Hat" with [æ] is a head covering, typically worn for protection or fashion, whereas "hut" with [ $\Lambda$ ] refers to a small, simple shelter.

These examples demonstrate how a minimal change from [æ] to [ $\Lambda$ ] or vice versa alters the meaning of the word.

Studying and recognizing the distinction between [æ] and [ $\Lambda$ ] in minimal pairs is important for language learners and individuals aiming to improve their English pronunciation. It ensures accurate and effective communication by using the correct vowel sound in appropriate contexts, enhancing overall language proficiency.
c. English vowel minimal pairs: [a:] vs. [ $\mathbf{0}$ ]

English vowel minimal pairs that contrast the sounds [a:] and [0]. These vowel sounds represent distinct phonemes in English and can be found in minimal pairs where a change in these sounds leads to a difference in word meaning.

The vowel sound [a:], often represented by the letter combination "ar" or "a" in English words, is a long, low back vowel. It is commonly found in words like "car," "park," and "start." This sound is produced with the tongue positioned low and back in the mouth, creating an open sound (Ladefoged \& Johnson, 2015).

The vowel sound [0], represented by the letter combination "or" or "aw" in English words, is a mid-back rounded vowel. It is commonly found in words like "more," "door," and "store." This sound is produced with the tongue positioned slightly higher and more rounded compared to [a:], resulting in a relatively rounded and slightly narrower sound (Ladefoged \& Johnson, 2015).

English vowel minimal pairs contrasting [a:] and [0] exemplify the distinction between the two vowel sounds. Here are some examples:

1) "car" / "core": The word "car" with [a:] refers to a vehicle used for transportation, while "core" with [0] refers to the central part or essence of something.
2) "park" / "pork": "Park" with [a:] refers to a designated area for recreation or public use, whereas "pork" with [0] refers to meat from a pig.
3) "start" / "store": "Start" with [a:] means to begin or commence, while "store" with [ 0 ] refers to a place where goods are sold.
These examples illustrate how a minimal change from [a:] to [ 0 ] or vice versa alters the meaning of the word.

Studying and recognizing the distinction between [a:] and [ 0 ] in minimal pairs is important for language learners and individuals aiming to improve their English pronunciation. It ensures accurate and effective communication by using the correct vowel sound in appropriate contexts, enhancing overall language proficiency.

## d. English vowel minimal pairs: [æ] vs [ $\varepsilon$ ]

The vowel sounds $[æ]$ and $[\varepsilon]$ are the contrasting elements. Let's examine the characteristics and distinctions between these vowel sounds (Ladefoged \& Johnson, 2015):

1) [æ]: This sound is represented by the letter "a" in words like "bat," "cat," and "hat." It is a low-mid front vowel sound. It is pronounced with the mouth relatively open and the tongue positioned low and forward.
2) [ $[\varepsilon]$ : This sound is represented by the letter "e" in words like "bet," "get," and "set." It is a mid-front vowel sound. It is pronounced with the mouth slightly more closed compared to [æ], and the tongue positioned slightly higher and more centralized.

By isolating the vowel sounds in these minimal pairs, we can observe how a change from [æ] to $[\varepsilon]$ alters the meaning of the word, emphasizing the importance of vowel distinctions in English.

Studying and recognizing the difference between [æ] and $[\varepsilon]$ in minimal pairs is valuable for language learners and individuals seeking to improve their English pronunciation. Understanding and producing these vowel sounds accurately contribute to effective communication and enhance overall language proficiency.

## e. English vowel minimal pairs: [p] vs [æ]

These minimal pairs consist of words that have the same consonant sounds but differ in the vowel sound, leading to a difference in word meaning.

In the minimal pair $[\mathrm{p}]$ and $[\mathfrak{x}]$, the vowel sounds $[\mathrm{p}]$ and $[\mathfrak{x}]$ are the contrasting elements. Let's examine the characteristics and distinctions between these vowel sounds (Ladefoged \& Johnson, 2015):

1) [p]: This sound is represented by the letter "o" in words like "hot," "dog," and "lot." It is a low-mid back vowel sound. It is pronounced with the mouth relatively open, and the tongue positioned low and back in the mouth.
2) [æ]: This sound is represented by the letter "a" in words like "cat," "hat," and "map." It is a low front vowel sound. It is pronounced with the mouth more closed compared to [p], and the tongue positioned low and forward.

By isolating the vowel sounds in these minimal pairs, we can observe how a change from $[\mathrm{p}]$ to $[æ]$ alters the meaning of the word, highlighting the significance of vowel distinctions in English.

Studying and recognizing the difference between [p] and [æ] in minimal pairs is valuable for language learners and individuals aiming to improve their English pronunciation. Accurate production and understanding of these vowel sounds contribute to effective communication and enhance overall language proficiency.

## f. English vowel minimal pairs: [ $\mathbf{\sim}]$ vs [ A ]

These minimal pairs consist of words that have the same consonant sounds but differ in the vowel sound, resulting in a difference in word meaning.

In the minimal pair $[\tau]$ and $[\Lambda]$, the vowel sounds [ $\tau]$ and $[\Lambda]$ are the contrasting elements. Let's examine the characteristics and distinctions between these vowel sounds (Ladefoged \& Johnson, 2015):

1) [ J$]$ : This sound is represented by the letter combination "oo" in words like "book," "look," and "good." It is a mid-back rounded vowel sound. It is pronounced with the lips rounded and the back of the tongue slightly raised in the mouth.
2) $[\Lambda]$ : This sound is represented by the letter "u" in words like "cup," "luck," and "understand." It is a mid-central vowel sound. It is pronounced with the tongue in a neutral position and the lips slightly relaxed.

By isolating the vowel sounds in these minimal pairs, we can observe how a change from $[\mho]$ to $[\Lambda]$ alters the meaning of the word, highlighting the importance of vowel distinctions in English.

Studying and recognizing the difference between [ $\tau$ ] and [ $\Lambda$ ] in minimal pairs is valuable for language learners and individuals aiming to improve their English pronunciation. Accurate production and understanding of these vowel sounds contribute to effective communication and enhance overall language proficiency.

## g. English vowel minimal pairs: [i:] / [I]

These minimal pairs consist of words that have the same consonant sounds but differ in the vowel sound, leading to a difference in word meaning.

In the minimal pair [i:] and [ I ], the vowel sounds [ i :] and [ I ] are the contrasting elements. Let's examine the characteristics and distinctions between these vowel sounds (Ladefoged \& Johnson, 2015):

1) [i:]: This sound is represented by the letter combination "ee" in words like "meet," "seem," and "deep." It is a long, high front vowel sound. It is pronounced with the tongue raised high and forward in the mouth, creating a relatively tense sound.
2) [r]: This sound is represented by the letter "i" in words like "sit," "big," and "win." It is a short, lax, high front vowel sound. It is pronounced with the tongue slightly lower and more relaxed compared to [i:], resulting in a shorter and less tense sound.

By isolating the vowel sounds in these minimal pairs, we can observe how a change from [i:] to [r] alters the meaning of the word, highlighting the significance of vowel distinctions in English.

Studying and recognizing the difference between [i:] and [r] in minimal pairs is valuable for language learners and individuals aiming to improve their English pronunciation. Accurate production and understanding of these vowel sounds contribute to effective communication and enhance overall language proficiency.

## 3. The Benefit of Learning English Minimal Pairs of Vowel

Learning English minimal pairs of vowels offers several advantages for language learners. Here are some key benefits:
a. Phonemic Awareness: Studying minimal pairs helps develop phonemic awareness, which is the ability to distinguish and manipulate individual sounds in a language. By focusing on vowel distinctions, learners become more attuned to subtle variations in pronunciation, leading to improved overall phonetic accuracy.
b. Pronunciation Accuracy: English is known for its complex vowel system, and mastering vowel sounds is crucial for clear and accurate pronunciation. Minimal pairs provide learners with targeted practice in differentiating similar vowel sounds. This training enhances their ability to produce and perceive the subtle differences between vowel sounds, leading to more precise pronunciation.
c. Word Differentiation: Minimal pairs showcase how a change in a single vowel sound can alter the meaning of a word. By studying minimal pairs, learners become aware of the significance of vowel distinctions in distinguishing between words. This knowledge helps avoid misunderstandings and improves word recognition skills, contributing to effective communication.
d. Listening Skills: Training with minimal pairs sharpens listening skills as learners become more attuned to subtle variations in vowel sounds. This heightened awareness enables learners to understand spoken English more
accurately, even in situations where the speaker's accent or pronunciation may differ from their own.
e. Spelling and Reading Proficiency: Understanding minimal pairs helps learners improve their spelling and reading skills. Since English spelling is not always straightforward, knowing the specific vowel sounds associated with different spellings allows learners to make more accurate predictions when encountering unfamiliar words.
f. Language Expansion: Acquiring knowledge of minimal pairs expands learners' vocabulary and expressive capabilities. By recognizing and utilizing different vowel sounds, learners gain access to a wider range of words and can communicate more precisely, effectively, and confidently in English.

It is important to note that while minimal pairs are a valuable tool, language learning is a holistic process. It is recommended to supplement the study of minimal pairs with comprehensive language learning methods, including exposure to authentic spoken English, practice in context, and guidance from language instructors or resources.

## D. Conclusion

In conclusion, the discussion about English minimal pairs of vowels highlights their significance in language learning and pronunciation accuracy. Studying minimal pairs helps develop phonemic awareness, improve pronunciation accuracy, enhance listening skills, and promote word differentiation. By understanding and recognizing the distinctions between vowel sounds, learners can communicate more effectively, expand their vocabulary, and improve their spelling and reading proficiency. Mastering English minimal pairs of vowels is an important aspect of achieving overall language proficiency. It is recommended to approach the study of minimal pairs in conjunction with comprehensive language learning methods for optimal results.

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