



MODERN PROBLEMS IN EDUCATION AND THEIR SCIENTIFIC  
SOLUTIONS

ANALYSIS OF ENGLISH VOWEL SOUNDS

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**Annatsiya,** *ushbu maqola ingliz tilidagi unli tovushlarning fonetik tahliliga bag'ishlangan. Tadqiqotda ingliz unlilarining artikulyatsion xususiyatlari, ularning monoftong va diftonglarga bo'linishi hamda nutqdagi funksional roli yoritiladi. Unli tovushlar tilning holati, lablarning shakli va tovush davomiyligi asosida tahlil qilinadi. Shuningdek, ingliz tilini ikkinchi til sifatida o'rganuvchilar duch keladigan asosiy talaffuz muammolari muhokama qilinadi. Maqola natijalari ingliz tili talaffuzini o'qitishda fonetik yondashuv muhim ekanini ko'rsatadi.*

**Kalit so'zlar:** *phonetics, English vowels, monophthongs, diphthongs, pronunciation, IPA*

**Аннотация,** *Данная статья посвящена фонетическому анализу гласных звуков английского языка. В работе рассматриваются артикуляционные особенности английских гласных, их классификация на монофтонги и дифтонги, а также их функциональная роль в устной речи. Анализ проводится на основе положения языка, формы губ и длительности звуков. Кроме того, обсуждаются типичные трудности, с которыми сталкиваются изучающие английский язык как иностранный. Результаты подчеркивают важность фонетического подхода в обучении произношению.*

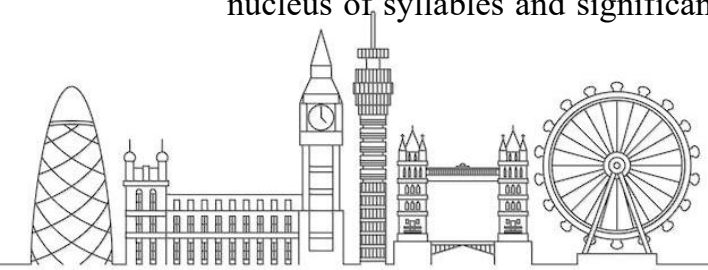
**Ключевые слова:** *фонетика, гласные английского языка, монофтонги, дифтонги, произношение, МФА*

**Abstract,** *this article presents a phonetic analysis of English vowel sounds. It examines the articulatory features of English vowels, their classification into monophthongs and diphthongs, and their role in spoken communication. The study analyzes vowel production in terms of tongue position, lip configuration, and vowel length. In addition, common pronunciation difficulties faced by learners of English as a second language are discussed. The findings emphasize the importance of phonetic awareness and systematic vowel instruction for improving pronunciation accuracy and speech intelligibility.*

**Keywords:** *phonetics, English vowels, monophthongs, diphthongs, pronunciation, IPA*

### Introduction

Pronunciation is a fundamental component of oral communication, and within pronunciation, vowel sounds play a central role. Unlike consonants, vowels form the nucleus of syllables and significantly influence how words are perceived by listeners. In





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English, even small differences in vowel quality or length can result in changes in meaning, making accurate vowel production essential for intelligible speech. The English vowel system is particularly complex when compared to many other languages. It contains a large number of vowel phonemes, including both stable vowels and gliding vowels, which are not consistently represented in English orthography.

As noted by English Phonetics and Phonology, vowel errors are more likely than consonant errors to cause misunderstanding because vowels carry a high functional load in speech. This article aims to explore English vowels from a phonetic perspective by analyzing their articulatory properties and classification. By focusing on monophthongs and diphthongs, the study seeks to explain why English vowels present difficulties for second-language learners and how phonetic knowledge can support more effective pronunciation learning<sup>32</sup>.

### Methods

The present study employs a descriptive and analytical method based on articulatory phonetics. Rather than conducting experimental research, the analysis relies on established theoretical descriptions of Standard British English vowels. The focus is placed on observable articulatory features such as tongue height, tongue position, lip rounding, and vowel length.

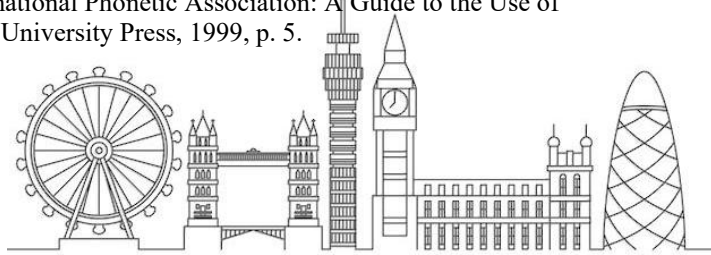
The vowel symbols and classifications used in this study follow the conventions of the International Phonetic Alphabet, as standardized by the International Phonetic Association<sup>33</sup>.

Major phonetic reference works were consulted to ensure accuracy and consistency. This method allows for a clear and systematic description of English vowels suitable for pedagogical and theoretical purposes.



<sup>32</sup> Roach, Peter. English Phonetics and Phonology: A Practical Course. 4th ed. Cambridge: Cambridge University Press, 2009, p. 11.

<sup>33</sup> International Phonetic Association. Handbook of the International Phonetic Association: A Guide to the Use of the International Phonetic Alphabet. Cambridge: Cambridge University Press, 1999, p. 5.





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This figure illustrates the articulatory features and phonetic classification of English vowel sounds. It presents the distinction between monophthongs and diphthongs and demonstrates how vowel production depends on tongue height (high, mid, low), tongue position (front, central, back), lip rounding (rounded and unrounded), and vowel length (long and short). The diagram also highlights the role of the International Phonetic Alphabet (IPA) symbols in representing vowel sounds accurately. In addition, the visual representation emphasizes common pronunciation contrasts and vowel length differences that are essential for intelligibility in spoken English. The figure supports the theoretical discussion by providing a clear and systematic overview of the English vowel system.

### Results

Monophthongs are vowel sounds that remain relatively stable during articulation. English monophthongs vary according to tongue height, tongue position, lip shape, and length.

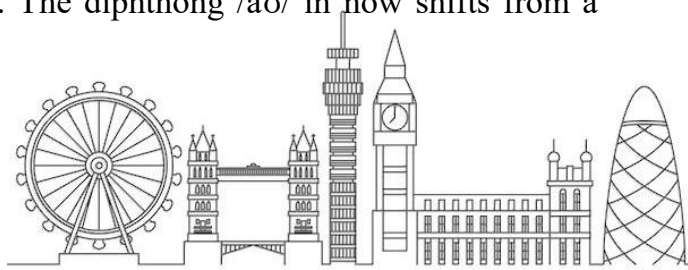
Table 1. Articulatory Features of English Monophthongs

| Vowel | Example | Tongue Height | Tongue Position | Lip Shape | Length     |
|-------|---------|---------------|-----------------|-----------|------------|
| /i:/  | see     | High          | Front           | Unrounded | Long       |
| /ɪ/   | sit     | High          | Front           | Unrounded | Short      |
| /e/   | bed     | Mid           | Front           | Unrounded | Short      |
| /æ/   | cat     | Low           | Front           | Unrounded | Short      |
| /ɑ:/  | father  | Low           | Back            | Unrounded | Long       |
| /ɒ/   | hot     | Low           | Back            | Rounded   | Short      |
| /ɔ:/  | law     | Mid           | Back            | Rounded   | Long       |
| /ʊ/   | put     | High          | Back            | Rounded   | Short      |
| /u:/  | food    | High          | Back            | Rounded   | Long       |
| /ɜ:/  | bird    | Mid           | Central         | Unrounded | Long       |
| /ə/   | about   | Mid           | Central         | Unrounded | Very short |

The schwa /ə/ is the most frequently occurring vowel in connected speech and typically appears in unstressed syllables.

### Diphthongs

Diphthongs are characterized by a smooth movement from one vowel position to another within a single syllable. English diphthongs can be grouped according to the direction of articulatory movement. The diphthong /eɪ/, as in day, begins with a mid-front vowel and glides toward a high-front position. Similarly, /aɪ/ in time starts from a low-front position and moves upward to a high-front vowel. In contrast, /ɔɪ/ in boy involves a glide from a mid-back to a high-front position. Another group of diphthongs shows movement toward the back of the oral cavity. The diphthong /aʊ/ in now shifts from a





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low-front to a high-back position, while /əʊ/ in go moves from a central vowel toward a high-back vowel. Finally, centering diphthongs such as /ɪə/ (near), /eə/ (hair), and /ʊə/ (tour) are characterized by a glide from front or back positions toward the central vowel /ə/.

### Discussion

The analysis shows that English vowel contrasts depend on a combination of vowel quality, length, and articulatory movement. This complexity explains why learners often struggle to distinguish between similar vowels such as /i:/ and /ɪ/. According to A Course in Phonetics, small changes in tongue position can result in perceptually significant differences.

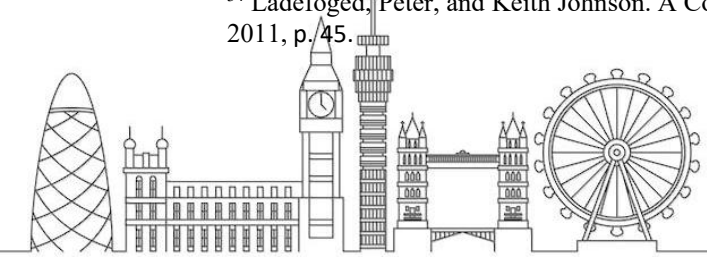
Another important factor is rhythm. English is a stress-timed language, and vowel reduction in unstressed syllables is a structural feature rather than a stylistic choice. Learners who pronounce all vowels clearly may sound unnatural despite correct articulation. These findings suggest that pronunciation teaching should emphasize articulatory awareness rather than relying solely on spelling-based explanations<sup>34</sup>.

**Conclusion**, this study demonstrates that English vowels form a complex yet systematic phonetic system. The distinction between monophthongs and diphthongs, together with differences in tongue position, lip rounding, and vowel length, plays a crucial role in meaning differentiation and speech intelligibility. A phonetic approach to vowel instruction enables learners to better perceive and produce English vowels, leading to more natural and effective communication. Future research may expand this analysis through acoustic studies or learner-based experiments.

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