

## Phonology Analysis Theory of Phonetics

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### Abstrak

Fitur fonetik seperti fonem, minimal *pairs*, *suspicious pairs*, dan prosedur yang telah diterapkan di dalam penelitian ini. Mengidentifikasi fonem yang dianalisis dan metode wawancara. Studi literatur digunakan untuk pengumpulan data, dan analisis data, (khususnya selama analisis). Fonem diselesaikan melalui beberapa proses, yaitu proses pemisahan dan proses penggabungan.

**Kata kunci:** Fonem, Fonetik.

### Abstract

Phonetic features such as phonemes, minimal pairs, suspicious pairs, and procedures are applied in this study. Identifies the analyzed phoneme, interview methods, native speaker involment and methods. Literature studies are for data collection, data analysis, and especially during analysis. Phonemes are completed through multiple processes including preprocessing (pre-process), separation process, merger process (separation procedure).

**Keywords:** *Phoneme, Phonetic.*

## INTRODUCTION

Linguists have frequently discovered absolute constraints in the patterning of phonemes in syllables. For example, it is frequently noticed that /h/ can only appear at the beginning of an English syllable and /N/ can only occur at the end. (For an explanation of the phonetic symbols, see Tables 1 and 2.) Similarly, certain phoneme combinations occur in the language while others do not.

In the General American English accent, /A/ can follow /r/ at the end of a syllable (car), but /ae/ cannot, and there are no exceptions to this rule. There are significantly more such gaps or constraints at the end of the syllable in various languages than at the beginning, and such asymmetry has been recognized as proof that the syllable has a specific type of internal structure (Goldsmith, 1990). However, it is less evident in English because the end of the syllable has far more constraints than the beginning. As a result, there has been considerable dispute about whether there is enough phonotactic imbalance to infer internal syllable structure.

One of the distinguishing features of human speech is its variability. No two voices are the same, and no two utterances are the same. However, variation in speech is not entirely random or chaotic. Rather, it emerges from a variety of distinct sources and might take the form of rule-governed patterns. For a variety of reasons, sociophonetic issues have stayed on the periphery of phonetics and phonology.

Above all, the dominance of specific theoretical models and methodological traditions has resulted in the de facto separation of social aspects from the "purely linguistic."

The generative tradition, for example, has placed emphasis on portraying the linguistic knowledge of the "*ideal speaker listener, in a completely homogeneous speech community*" (Chomsky, 1965). As a result, differences amongst speakers of a given language have become less of a worry. This paper solely looked at phonetic properties such phonemes, minimal pairings, and the processes used to detect phonemes.

## METHOD

This research employs two types of data: main data and secondary data. The core data for this study are a few words gathered by asking native speakers questions, while the secondary data are dictionaries. The writers supplemented main data with secondary data. Data for the study were gathered through interviews and a library survey (Assingkily, 2021). The author used the interview approach to interview and interrogate the respondent. During the library search, the authors read a huge number of books and explored the internet for analytical data. The authors employed many approaches to assess the data, particularly the phonemes: preliminary method, separation method, and combination procedure.

## FINDINGS AND DISCUSSION

### *Theory of Phonetic*

Phonology is the study of speech systems or patterns of speech. Phonetics and phonology are the two branches of phonology (Ladefoged & Johnson, 2011). Phonetics is the study of sound forms. He specializes in three areas of phonetics: articulatory phonetics, hearing phonetics, and finally acoustic phonetics.

#### 1. Vowels

Vowels are the letters A, I, U, E, and O. It turns out that the five vowels in English have different sounds. A vowel sound is a specific way of pronouncing a sound (Ambalegin & Suryani, 2018).

##### Front Vowel

A front vowel is a sort of sound that is employed in speech or human annunciation of certain vowels. It gets its name from the fact that the tongue must be held in front of the mouth in order to produce these sounds. They're sometimes referred to as "*bright vowels*" since they sound cleaner or brighter than vowels created with the mouth further back. One of the secrets to producing a front-of-the-mouth vowel sound is keeping the tongue in front without causing a narrowing of the vocal tract.

If such a constriction occurs, it produces a consonant sound rather than a vowel sound. Proper tongue position is usually learnt through practice, which can be difficult for non-native speakers of languages that utilize them. The International Phonetic Alphabet recognizes nine front vowel sounds, however only five are utilized in the English language. These are long "e" and "a," as well as short "i," "e," and "a."

To make this type of vowel sound, the tongue must go forward in the mouth, but the tip must usually remain low, about even with the lower front teeth. Variations in the arch of the tongue produce three sorts of vowels: high, high-mid to low-mid, and low.

Front-specific vowels are distinguished from back vowels, which are produced with the tongue as far back in the mouth as possible, as follows:

a. Long E

The longest front vowel, indicating that the tongue is most arched toward the gum line, is "e." The long "e" sound in English has 23 different spellings and can be found in words like "eat," "debris," and "people." As the highest and most fronted of the vowels, the long "e" is rarely pronounced wrong, even by individuals acquiring English later in life, and is generally heard early in children's speech.

b. Long A

The long "a" is believed to be in the high-mid range. Examples include the terms "ate," "paper," and "tray." In English, there are 36 alternative spellings of this vowel, although the most common is the letter "a." Because of the position of the tongue, speakers have little issues with this sound.

c. Short I

Another example is the short "i" sound. Common English words that use this vowel sound include "ship," "it," and "hit." This sound has 33 distinct recognized spellings in English. Because the tongue is not as high in the mouth as it is with the long "e" or "a," the short "i" sound is typically more difficult for children and non-native speakers to grasp.

d. Short E

The short "e" sound, found in words like "bed," "head," and "get," is found in the low-mid front vowel range. The most prevalent spelling is "e," but there are 19 distinct English versions. This vowel is influenced by dialect and is frequently difficult for non-native speakers to learn to discern distinct regional pronunciations of certain nouns and terms.

e. Short A

In English, the final sound considered to be in the front-of-the-mouth vowel group is the short "a" sound. Examples include "at," "laugh," and "plaid." The most common spelling is "a," however in English, there are 13 other versions. Because the tongue is not generally arched and the mouth opens wider for this sound, the short "a" is considered a low vowel. This is the most frequently mispronounced vowel by English-speaking youngsters, yet it is not a common sound in many global languages.

### Central Vowel

All central vowels are generated in an intermediate position between front and back vowels, with the body of the tongue raised towards the roof of the mouth in the location where the hard and soft palates join.

The long rounded vowel // (as in urban) is used. Because it is so long, it is sometimes written as //. It's the **ROUNDED MID CENTRAL** vowel. This vowel appears only in stressed syllables.

A stressed syllable is a syllable in a multisyllabic word that is spoken with greater emphasis than the other syllables. The added emphasis is frequently obtained by raising the pitch of the consonants that comprise the syllable. A superscript mark (ˈ) before the affected syllable is used to indicate primary emphasis. Some syllables in multisyllabic words, on the other hand, receive no stress at all.

They are pronounced without any additional emphasis: no extra respiratory energy is expended to make them stand out. These are syllables that are not stressed. In the word photograph, for example, the second syllable '-to' is unstressed.

The unrounded and short vowel // (as in annoy) is the counterpart vowel of //. As a result, it is the MID CENTRAL UNROUNDED vowel. It is commonly referred to as the neutral vowel or schwa in German. This is because, unlike //, the neutral vowel is most typically found in unstressed syllables, either in syllable-initial (e.g. around) or syllable-final (e.g. soda).

When a neutral vowel precedes a /r/ consonant, it can also become r-colored, i.e. // or /r/ (as in letter). Varieties of English, such as: (1) Before vowels (as in rip /rip/); (2) Before consonants (as in part /part/); (3) Before a pause (as in tar /tar/).

### Back Vowel

Back vowels are pronounced with rounded lips (as opposed to front vowels, which are all generated with unrounded lips). Furthermore, two of the back vowels are generated with a high tongue height, one with a medium elevation, and two with a low tongue elevation.

- a. /u/ (as in food). It has rounded lips and is known as the HIGH BACK ROUNDED vowel. Because it is a long vowel, it can be spelled /u/.
- b. /ʊ/ as in good. It is also produced with rounder lips. It is, however, articulated with a little decreased tongue elevation, near to the mid-high position. Furthermore, it is articulated significantly further away from the center of the mouth than the /u/ vowel.

It is, however, near the back and so a back vowel. This lowered and concentrated high back vowel is hence known as the mid-high, fairly-back rounded vowel. To put it another way, the MID-HIGH BACK ROUNDED vowel.

## **2. Consonant**

Consonants are sounds that are completely or partially articulated. The upper vocal tract is closed. As a component of the upper vocal tract. Vocal tract located above the larynx. Consonants are merely sounds that are made for the point or locations at which the air stops. The classification of consonants is based on three factors: (a) Articulation location; (b) Articulation point; (c) Nature vocal cords (McMahon, 2002).

## **CONCLUSION**

The vowel made with mid tongue elevation is the conclusion from this information. The vowel having a somewhat lower and more centered tongue position than the vowel. Nonetheless, they are similar enough to be classified as a mid back rounded vowel. Because they are long vowel sounds, they can be written as //. The unrounded and short vowel // (as in annoy) is the counterpart vowel of //. As a result, it is the MID CENTRAL UNROUNDED vowel. It is commonly referred to as the neutral vowel or schwa in German. This is because, unlike //, the neutral vowel is most typically found in unstressed syllables, either in syllable-initial (e.g. around) or syllable-final (e.g. soda).

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