AN ANALYSIS OF STUDENTS PROBLEM TO PRONOUNCE ASPIRATED /P/, /T/, /K/ AT INITIAL POSITION OF ENGLISH WORDS
(Case Study: The Third Semester Students of English Department at Universitas Ekasakti)

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Abstract

The purpose of this research was to analyze the third semester students’ problem in learning English basic sounds pronunciation. The research design was case study. The data were collected by recording the students’ pronunciation. The subject of the research were the third Semester Students of English Department at Universitas Ekasakti). The result of the research was found that Each aspirated /p/, /t/, /k/ have two allophones, [ph] and [p], [th] and [t], [kh] and [k]. Then, all instances of [ph] occured immediately before a stressed vowel. It can be said that the following rule: /p/ becomes [ph] when it occured before a stressed vowel or initial position of English words. Moreover, aspirated /p/, /t/, /k/ sounds were really pronounced in two different ways. First, when these sounds came at the beginning of the word they are always followed by a puff of breath. Second, if aspirated /p/, /t/, and /k/ occur at the end of final position of English words, it is not necessary to pronounce them by following a puff of breath. In following there is a chart of aspirated /p/, /t/, /k/ sounds at initial position of English words.

Keywords: Pronunciation, Initial Position, English Words

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I INTRODUCTION

English plays essential roles in many sectors of life such as business, diplomacy, trade, and scientific inquires. In Indonesian, English is decided to be one of the compulsory subjects at school. In fact, it has been taught from the elementary school up to the university. In learning English the students have to master four language skills very well. The four skills are listening, speaking, reading, and writing. Pronunciation is a part of speaking, which should be mastered by the English students. It studies language sound, which is produced through mouth for communication. According to Robinnet (2002) one of the most detailed definitions in dictionary states that pronunciation is the act or the result of producing the sounds of speech, including articulation, vowel formation, accent and intonation, often with reference to the correctness or acceptability of the speech sounds. There are three basic reasons for practicing and developing correct and good English pronunciation. Underhill (1980) states that there are several basic reasons for the learners to master the correct English pronunciation, they are:
a. The hearer will understand more easily when speaker makes a correct pronunciation.

b. It will help the learners to hear English sound better.

c. Being able to say a word with correct pronunciation makes it easier to learn the word with correct pronunciation makes it easier to learn the word and the meaning, and furthermore, correct pronunciation helps the learners to fix a word in their memory.

Based on the observation to the teacher who teach pronunciation, the researcher found that teacher got confused when her students pronounce aspirated /p/, /t/, /k/ at initial position of English words, as represented in words: pen, ponds, tail, come, colour, and so on. The problem was caused by two factors. First, phonologically, there are the differentiations between English phonological rules and Indonesian phonological rules, which called interlanguage errors. Second, English is only used in certain circumstances while for daily speaking the students use their own language (mother tongue). It means English used in formal situation, for instance: in the English subject, students and English teacher or lecturer communicate each other.

System of English Segmental Phonemes

A language has two systems, they are sound system and meaning system, and both systems are related each other (Wardhaugh, 1977: 4). Certain speech sounds that are produced in speech are related to certain meanings or contents. Since the sound system is closely related to the system of meaning, pronunciation plays a very important role in communication, and it is one aspect that has to be considered by language learners.

Thus, since the system of sound is one of the important aspects of language, foreign language learners are demanded to adjust their tongue with the correct pronunciation of the target language in order to avoid misunderstanding in communication.

In describing the sound system of a language, there should have the distinctive elements that can be called as phonemes. According to Robin (1964: 101), phonemes are the available sound differences in human speech into a limited number of recurrent distinctive units. In any language, phonemes are relatively small. And also the numbers of phonemes differ both from one language to another. Phonemes are conventionally represented between the slant lines, for example: /p/, /b/, /t/, /k/, /c/, /g/, and so on.

In English there are two kinds of segmental phonemes, they are: vowels and consonants (Jones: 1960). Vowels and consonants can be distinguished on the basis of differences in articulation, as well as acoustically and functionally.

Vowels

In phonetics, a vowel is a sound in spoken language that is characterized by an open configuration of the vocal tract. The word vowel comes from the Latin word “vocalist” that has meaning, “uttering voice” or “speaking”.

In English we can find twelve vowels. Vowels are described in reference to a position of the tongue and the lips, not to the place or degree of the obstruction (Allan and Kuiper, 1996: 40). In addition, according to Fromkin and Rodman (1983: 46) vowels are speech sounds that are produced without obstruction of the air stream as it passes from the larynx to the lips. Vowels are sounds produced by moving some part of the tongue to a certain height, but still there is no obstruction of the air stream. The quality of vowels depends upon the position of the tongue and lips.

Vowels are described mainly in relation to the highest point of the hump formed by the tongue. In order to say where this highest point lies in the mouth we must fix it on two axes at the same time. The horizontal axis is from front to back the mouth, and the vertical axis from the floor to the roof of the mouth.

Consonants

Consonants are the sounds made with a narrow or complete closure in the vocal tract; the airflow is either completely blocked momentarily or restricted so much that noise in produced (O’grady, Dobrovolsky and Aronoff: 1993). And also according to Zainuddin (1996) consonants are sounds produced by obstructing of air coming from the lungs by the organ of speech somewhere in the mouth or nose. They are produced with obstruction in speech organs when the sounds are uttered. The air goes out from the lungs gets block in the mouth.

Boey (1997) states that consonant are segments marked by interruption of the
airstreams. In addition, Syafei (1988) defines consonants as the speech sounds which are produced with some kinds of closure in the mouth, restricting the escape of air.

In the conclusion, consonants are those speech sounds, which are produced by stopping or obstructing this flow of air. And also consonant is any speech sound characterized by constriction or closure at one or more points in the breath channel.

**Place of Articulation**

The place of articulation is where in the vocal tract the articulators of the consonant act (Robert: 2005). Place of articulation is one of the basic components of speech production. It describes the location in the vocal tract of the major constriction made by the articulators during the production of a speech sound.

The number of places of articulation may vary from one language to another. The following are those which are required for English and were introduced in this following explanation (Allan and Kuiper: 1996):

1. **Bilabial**
   - These are sounds formed by the articulation of the upper and lower lips. In English there are four bilabial sounds (/p/, /b/, /m/, /w/).
2. **Labio Dental**
   - The lower lip and the upper incisors produce labio dental sound (/f/, and /v/).
3. **Inter Dental**
   - The sound is produced by tip of the tongue that makes contact with the incisors. There are two symbols for this sound (ö) and /ð/.
4. **Alveolar**
   - Alveolar sounds are produced by the tip/blade of the tongue articulating with the alveolar ridge, which lies behind the upper front teeth. For example: /t/, /d/, /s/, /z/, /n/, and /l/.
5. **Palatal**
   - It is the sound that involves the front of the tongue and the hard palate. For example: /š/, /ž/, /č/, /j/, /r/, and /y/.
6. **Velar**
   - Velar sounds are the result of the back of the tongue articulating with the soft palate or velum. For example: /k/, /g/, /ŋ/.
7. **Glottal**
   - It extends from behind the velum to the larynx. There is only one sound in the pharyngeal part /h/.

**II RESEARCH METHOD**

In this research the researcher used case study as research method. The purpose of the research was to analyzed Students’ problem to pronounce aspirated /p/, /t/, /k/ at initial position of English words. The data were collected by analyzing the students’ pronunciation. The data were taken by recording the students’ voice when they were pronouncing the sentences provided by the researcher. The data were analyzed by using inter-rater reliability.

The subjects of this research were the third semester students of English Department at Universitas Ekasakti.

**III RESULTS AND DISCUSSION**

Aspirated sounds refer to a puff of air when a sound is produced. Aspirated sounds are the short puff of breath, which occurs between the release of a stop and onset of voicing (Allan and Kuiper: 1996). And Richard (1985) states aspirated sounds are the little puff air that sometimes follows a speech sound. There is a strong and very brief burst of air followed by a short period of voiceless, while the air escapes.

In addition, Robins (1964) states that aspirated sound is the release of closure may be allowed by a small puff of air. It means the sound is followed by a puff of air. If you put your hand right in front of your mouth as you say the English words below, you will feel the air.

In English, it will be found that /p/, /t/, /k/ as the aspirated sounds, which are voiceless stops. It has a puff of air after them when they are the first sound in a word or syllable.
To illustrate aspirated sounds, the students can hold up a piece of facial tissue a few inches away from your mouths and push it with a puff of air while pronouncing a word containing the aspirated /p/, /t/, /k/ sounds. And the other illustrates, putting the hand close to the mouth and utter these words can test it. The student can fell a small puff of air on the hand when release, for example /t/ in ten [tʰɛn].

During the /p/ pronunciation the lips fit together. The consonant /p/ is formed by closing the lips and raising the palate. When opening the lips, the air suddenly goes out from the mouth and /p/ is aspirated.

And during the /t/ pronunciation the front of the tongue touches the tooth ridge. It is voiceless stop made with the tip of the tongue on the tooth ridge.

The last during the /k/ pronunciation the middle of the tongue touches the velum. The /k/ is voiceless velar stop made by raising, the soft palate and raising the back of the tongue to touch the soft palate.

Each aspirated /p/, /t/, /k/ have two allophones, [pʰ] and [p], [tʰ] and [t], [kʰ] and [k]. We should know how to determine these sounds, for example, when /p/ becomes [ph]. Here, we might begin by trying to determine what all of the occurrences of [ph] have in common. One thing we observe is that all instances of [pʰ] occur immediately before a stressed vowel. Those we can hypothesize the following rule: /p/ becomes [pʰ] when it occur before a stressed vowel or initial position of English words.

Aspirated /p/, /t/, /k/ sounds are really pronounced in two different ways. First, when these sounds come at the beginning of the word they are always followed by a puff of breath. Moreover, there is also a puff of breath at medial position of English words. Second, if aspirated /p/, /t/, and /k/ occur at the end of final position of English words, it is not necessary to pronounce them by following a puff of breath. In following there is a chart of aspirated /p/, /t/, /k/ sounds at initial position of English words:

| Aspirated /p/, /t/, /k/ sounds at initial position of English words (Hammound: 1964) |
|---|---|---|
| /p/ | /t/ | /k/ |
| Peel | [pʰil] | Teal | [tʰil] | Keel | [kʰil] |
| Pick | [pʰIk] | Tick | [tʰIk] | Kick | [kʰIk] |
| Pale | [pʰeI] | Tail | [tʰeI] | Kale | [kʰeI] |
| Pen | [pʰɛn] | Ten | [tʰɛn] | Ken | [kʰɛn] |
| Pan | [pʰæn] | Tan | [tʰæn] | Can | [kʰæn] |
| Pool | [pʰul] | Tool | [tʰul] | Cool | [kʰul] |
| Put | [pʰut] | Took | [tʰut] | Cook | [kʰut] |
| Pore | [pʰɔr] | Tore | [tʰɔr] | Core | [kʰɔr] |
| Puff | [pʰʌf] | Tough | [tʰʌf] | Cuff | [kʰʌf] |
| Paul | [pʰɔl] | Tall | [tʰɔl] | Call | [kʰɔl] |
| Pot | [pʰɔt] | Tot | [tʰɔt] | Cot | [kʰɔt] |

It can be summarized that when the aspirated /p/, /t/, /k/ sounds are at the initial position or beginning position or before the stressed syllables, they are pronounced with slight pronunciation. They are strongly aspirated. In can be concluded that h-sound or in another way that /p/, /t/, /k/ sounds are pronounce with a strong puff air.

In addition, sometimes there are aspirated when they are at the medial position. It can be seen in the following chart. Here are the charts of aspirated /p/, /t/, /k/ at the medial position.
Un-aspirated /p/, /t/, /k/ sounds at medial position of English words
(Hammound: 1999)

|   | /p/  |   | /t/  |   | /k/  |
|---|------|---|------|---|------|
| Teepee | [tʰiːpi] | Detour | [ditur] | Decal | [dikæl] |
| Chipper | [ʃiˈprɛ] | Bitter | [bɪtr] | Bicker | [bɪkər] |
| Tapir | [tʰɪpə] | Latex | [lætɛks] | Acorn | [əkɔrn] |
| Weapon | [wɛpn] | Petty | [pʰɛti] | Pepper | [pʰɛpr] |
| Dapper | [dæpr] | Attic | [ətɪk] | Khaki | [kʰæki] |
| Blooper | [blupr] | Duty | [dʌti] | Cuckoo | [kʰʌku] |
| Open | [oʊn] | Proton | [prɒtən] | Trochee | [tʰrʊki] |
| Guppy | [ɡʌpi] | Butter | [bʌtr] | Stucco | [stʌkə] |
| Pauper | [pʰəpr] | Haughty | [hæti] | Gawky | [ɡəkɪ] |
| Topic | [tʰæpr] | Cottage | [kʰætɪ] | Hockey | [hæki] |

On the other hand, when the consonants /p/, /t/, /k/, occurs at the end of a syllable or in unstressed position they are pronounced with no aspirated. It means the h-sound do not find in final position. Here is the chart that shows the English words, which do not use aspirated sound.

Un-aspirated /p/, /t/, /k/ sounds at final position of English words
(Hammound: 1999)

|   | /p/  |   | /t/  |   | /k/  |
|---|------|---|------|---|------|
| Leap | [liːp] | Elite | [elɪt] | Leek | [lɛk] |
| Lip | [lɪp] | Lit | [lɪt] | Luck | [lʌk] |
| Rape | [rep] | Rate | [reɪt] | Rake | [reɪk] |
| Rep | [rʰɛp] | Pet | [pʰɛt] | Peck | [pʰɛk] |
| Rap | [ræp] | Rat | [ræt] | Rack | [ræk] |
| Coop | [kʰap] | Coot | [kʰɔt] | Kook | [kʰʊk] |
| Soap | [sɔp] | Float | [flɔt] | Soak | [sɔk] |
| Cup | [kʰʌp] | Cut | [kʰʌt] | Luck | [lʌk] |
| Top | [tʰap] | tot | [tʰæt] | lock | [lɔk] |

In the conclusion, there is aspirated /p/, /t/, /k/ sounds at the beginning position or initial position of English words and also at the middle position. And it contrasts at the final position, which we do not necessary to use aspirated sounds in pronouncing English words.
IV CONCLUSION

1. Each aspirated /p/, /t/, /k/ have two allophones, [pʰ] and [p], [tʰ] and [t], [kʰ] and [k]. We should know how to determine these sounds, for example, when /p/ becomes [ph]. Here, we might begin by trying to determine what all of the occurrences of [ph] have in common. One thing we observe is that all instances of [pʰ] occur immediately before a stressed vowel. Those we can hypothesize the following rule: /p/ becomes [pʰ] when it occur before a stressed vowel or initial position of English words.

2. Aspirated /p/, /t/, /k/ sounds are really pronounced in two different ways. First, when these sounds come at the beginning of the word they are always followed by a puff of breath. Moreover, there is also a puff of breath at medial position of English words. Second, if aspirated /p/, /t/, and /k/ occur at the end of final position of English words, it is not necessary to pronounce them by following a puff of breath. In following there is a chart of aspirated /p/, /t/, /k/ sounds at initial position of English words.
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