

CHAPTER II

THEORITICAL FOUNDATION

The focus is limited to English fricative consonant sounds. There are many more consonants than vowels.¹ English only has a fraction of the full range of possible consonants, so illustration of many of these symbols involves more extensive consideration of languages other than English. The researcher discusses the theories from some linguists to analyze the statement of the problem.

The paper focuses on the fricative consonant performed by the fifth semester student with sundanese background. It is important to understand both Sundanese and English in order to find out the finding. Here are the theories that will be applied

A. Definition of Phonology

There are many definition of phonetics, one of the definition is stated by Yule on his book, phonetics is the general study of speech sound.² While, Katamba in his

¹ Davidd Odden, *Introducing Phonology* (Cambridge: Cambridge University Press, 2006), 26.

² George Yule, *The Study of Language, 3rd Edition* (Cambridge: Cambridge University Press, 2006), 30.

book *An Introduction to Phonology* has another statement on phonetics that is the study of the inventory of all speech sounds which humans are capable of producing.³

The researcher can easily make conclusion what the phonetics is from all the perspectives that have already previously read. The phonetics is the study of the language that concerned with the speech sounds in which the sounds are described.

B. Definition of Pronunciation

Dalton and Seidholfer (1994: 7) as cited in Mustikareni (2013: 10) stated that a “person’s pronunciation is one expression of that person’s self- image”. That is why a word can be uttered in different ways by various individuals or groups, depending on many factors, such as in the area in which they grow up, live, whether they have speech disorder, their ethnic group, their social class, and their education.

Ur (2002: 103) believed that “pronunciation is the use of words to convey appropriate meaning through sounds that uttered

³ Francis Katamba, *An Introduction to Phonology* (London: Longman, 1989), 1.

correctly or construct the sentence in a way that sound acceptable".⁴ The aim of pronunciation is to ease the speaker and hearer in receiving message on communication. The message will be easy to receive, if it delivers clearly and can be understood, so what the speaker wanted from the hearer can be received as its purpose

From the definitions above it can be conclude that pronunciation is the way we produce sounds of words or pronouncing the words meaningfully and accurately to be understood by others in communication or in process of teaching learning English.

C. English Consonant

Consonant as a sound, voiced and voiceless, in which the airstream an obstructed through a narrowing or complete closure of the mouth passage.⁵ This statement is supported by Dardjowidjojo, he states in the production of a consonant, the parts of the mouth involved are the tongue, the lips, the teeth, the tooth ridge, the palate and the velum,

⁴ Ur,P, *A Course in Language Teaching: Practice and Theory* (Cambridge: Cambridge University Press, 2002), 103

⁵ Peter Roach, *English Phonetics and Phonology: A Practical Course (4th Ed)* (Cambridge: Cambridge University Press, 2000), 10-11.

and the uvula.⁶ These are called the points of articulation. There are two points of articulation; manner and place of articulation.

a. Place of Articulation

Linguists agreed that consonants are described in three different ways, those are place, manner, and voicing.⁷ As we have seen, the location of the active and passive articulators determines the place of articulation for a consonant. In English, consonants are produced at eight places of articulation. Since we have now covered all the other articulatory parameters required to describe consonants, introducing and defining these places will allow us to build up a complete consonant phoneme system for English. In the tables below, the phoneme or allophone in question is initial in the example word, unless another part of that word is bold-face.

Place of articulation focuses on where the sounds are made and produced. On sounds production, each

⁶ S. Dardjowidjodjo, *English phonetics & phonology for indonesians* (Jakarta : Yayasan Obor Indonesia, 2009), 23.

⁷ H. Rogers, *The Sounds of Language: An Introduction to Phonetics: Learning About Language* (Essex: Pearson, 2000), 192.

consonant has its own articulator" s place. The consonants on this place of articulation are classified as follow:

1. Bilabial

For a bilabial sound, the active articulator is the bottom lip, and the passive articulator is the top lip. The consonants are [p], [b], [m]. Here are the examples: 'pat' /pæt/, 'bat' /bæt/, 'mat' /mæt/.⁸

2. Labiodental

Labio- refers to lips while dental is referring to teeth. The sounds are articulated in a way the upper teeth touching the bottom lip. The consonants belong to labiodental are [f] and [v].⁹ For example: 'fat' /fæt/, 'vat' /væt/.

3. Dental

The sounds are formed with the tongue insert between the bottom lip and the upper lip. The sounds

⁸ April McMahon, *An Introduction to English Phonology* (England: Edinburg University Press, 2002), 31.

⁹ Victorian Fromkin and Robert Rodman and Nina Hyams, *An Introduction to Language seventh edition* (Boston : Heinle Thomson Corporation, 2003), 242.

are represented by the [θ] and [ð]. The examples:
 ‘think’ /θɪŋk/ dan ‘these’ /ði:z/.¹⁰

4. Alveolar

The alveolar consonants are produced by the front part of tongue rising on the alveolar ridge. The consonants are [t], [d], [n], [s], [z], [l], and [r]. For examples: ‘top’ /tɑ:p/, ‘dip’ /dɪp/, ‘nut’ /nʌt/, ‘sit’ /sɪt/, ‘zoo’ /zu:/, ‘lap’ /læp/, ‘right’ /raɪt/.

When we pronounce the consonant [l] and [r], we can feel our tongue touching the bony tooth ridge. We can feel it through pronouncing consonant [l] in a word ‘lap’ /læp/. The tip of the tongue rises to the alveolar ridge leaving the rest of the tongue down. According to *An Introduction to Language* book, [r] is pronounced in a variety ways. But, many English speakers pronounced it by curling the tip of the tongue back behind the alveolar ridge.¹¹

¹⁰ Fromkin, *An Introduction to Language seventh edition*, 242.

¹¹ Fromkin, *An Introduction to Language seventh edition*, 197.

5. Postalveolar

If you move your tongue tip back behind the alveolar ridge, you will feel the hard palate, which then, moving further back again, becomes the soft palate, or velum. Postalveolar sounds are produced with the blade of the tongue as the active articulator, and the adjoining parts of the alveolar ridge and the hard palate as the passive one. They include two fricatives, and the affricates introduced in the last section. For examples, /ʃ/ ship, /ʒ/ beige, /tʃ/ chunk, /dʒ/ junk.¹²

6. Palatal

Palatals are produced by the front of the tongue, which moves up towards the hard palate. We have so far encountered two palatal sounds: the approximant /j/ in yes, and the voiceless palatal stop [ç] in kitchen. Recall, however, that [ç] is the allophone of /k/ found before certain vowels; velar [k] appears elsewhere. There is a similar pattern for /g/, which

¹² April McMahon, *An Introduction to English Phonology*, 32.

has as allophones velar [g] in garden and palatal [ʃ] give. Since we are constructing a phoneme system here, these allophones are not included in the list. For example : /j/ yes.¹³

7. Velar

Sounds in which there is a constriction between the back of the tongue and the velum are called velar sounds.¹⁴ Another statement from April McMahon For velar sounds, the active articulator is the back of the tongue, and the passive articulator is the velum, or soft palate. And the consonants are, /k/, /g/, /ŋ/, /x/. There is a further accent difference involving velar sounds: in some varieties of English, notably Scottish ones, there is a voiceless velar fricative, /x/: this is the sound at the end of Scots loch, which speakers of other accents typically replace with a [k].¹⁵

¹³ April McMahon, *An Introduction to English Phonology*, 33.

¹⁴ Philip Carr, *English Phonetics and Phonology 2nd Edition* (Oxford: Blackwell publishing Ltd, 2013), 14.

¹⁵ April McMahon, *An Introduction to English Phonology*, 33.

8. Glottal

Glottal sounds are in the minority in articulatory terms, since they do not involve the tongue: instead, the articulators are the vocal folds, which constitute a place of articulation as well as having a crucial role in voicing. English has two glottal sounds. The first is allophonic, namely the glottal stop, [ʔ], which appears as an intervocalic realisation of /t/ in many accents, as in *butter*. The glottal stop is technically voiceless, though in fact it could hardly be anything else, since when the vocal folds are pressed together to completely obstruct the airstream, as must be the case for a stop sound, air cannot simultaneously be passing through to cause vibration. The second, the voiceless glottal fricative [h], is a phoneme in its own right. For example, we try to pronounce the words ‘*butter*’ /'bʌtʔ.ə/ and ‘*bottle*’ /'bɑ:t ʔl / without pronouncing the –t.¹⁶

¹⁶ April McMahon, *An Introduction to English Phonology*, 33.

b. Manner of Articulation

To produce any consonant, an active articulator, usually located somewhere along the base of the vocal tract, moves towards a passive articulator, somewhere along the top. Where those articulators are, determines the consonant's place of articulation, as we shall see in the next section. How close the active and passive articulators get, determines the manner of articulation. There are three main manners of articulation, and one subsidiary case which in a sense is intermediate between the first two.¹⁷ Here are several types of manner articulation:

1. Voiced and Voiceless sound

If the vocal cords are together, the air flows through its way and cause a vibration called voiced. A simply way to identify whether the consonant is voiced or not can be noticed by the existence of the

¹⁷ April McMahon, *An Introduction to English Phonology*, 28.

vibration in the vocal cords. The voiced consonants are [b, d, g, m, n, ŋ, v, z, ʒ, w, dʒ, ð].¹⁸

Voiceless sound can be articulated if the vocal cords are separated, the air flows freely through the glottis and supraglottal cavities. There is no vibration while pronouncing voiceless consonant. The consonants are [p, t, k, f, θ, s, ʃ, h, tʃ].¹⁹

2. Stop

The articulators in question may form a stricture of complete closure; this is what happens when one produces the first sound in pit. Here the lower and upper lips completely block the flow of air from the lungs; that closure may then be released, as it is in pit, and may then produce a sudden outflow of air. Sounds which are produced with complete closure are referred to as stops (or plosives).

If a constriction is formed which completely blocks the flow of air, the resulting sound, such as t,

¹⁸ Fromkin, *An Introduction to Language seventh edition*, 244.

¹⁹ Fromkin, *An Introduction to Language seventh edition*, 244.

is called a stop.²⁰ Thus, it is formed with stopping the airflow and then letting it go abruptly. The sounds are also called plosive because a complete closure in the vocal tract is made behind which the air pressure builds up and can be released explosively. The sounds are [p, b, t, d, k, g, ʔ]. For example: ‘play’ /pleɪ/, ‘bed’ /bed/, ‘ten’ /ten/, ‘die’ /daɪ/, ‘keen’ /ki:n/, ‘go’ /gou/, ‘bottle’ /bɑ:təl/.

3. Nasals

formed by completely closing the mouth at some point, the soft palate remaining lowered so that the air is free to pass out through the nose: examples m, n. (The nasal consonants are the only English sounds in which the soft palate is lowered).²¹ Thus, the sounds are voiced sounds. For example: ‘my’ /maɪ/, ‘nine’ /naɪn/, ‘sink’ /sɪŋk/.

4. Fricatives

The air coming from the lungs has to squeeze through a narrow gap at high speed, creating

²⁰David Odden, *Introducing Phonology*, 30.

²¹Daniel Jones, *An Outline of English Phonetics*, 14.

turbulence, or local audible friction, which is heard as hissing for a voiceless fricative, and buzzing for a voiced one.²² Sounds which are produced with this kind of constriction entail a bringing together of the two articulators to the point where the airflow is not quite fully blocked: enough of a gap remains for air to escape, but the articulators are so close together that friction is created as the air escapes. Sounds of this sort are referred to as fricatives.²³ The manner of articulation used in producing the set of sounds [f, v, θ, ð, s, z, ʒ, ʃ, h]. Here are the examples: ‘fish’ /fɪʃ/, ‘veal’ /vi:l/, ‘thin’ /θɪn/, ‘this’ /ðɪs/, ‘send’ /send/, ‘zinc’ /zɪŋk/, ‘vision’ /vɪʒ. ə n/, ‘share’ /ʃer/, ‘high’ /haɪ/. The [h] is classified as a fricative because of the hissing sound produced by air or noise at the glottis.

5. Affricates

Some sounds are produced by a stop closure followed immediately a gradual release of the

²² April McMahon, *An Introduction to English Phonology*, 29.

²³ Philip Carr, *English Phonetics and Phonology 2nd Edition*, 37

closure that produces an effect characteristic of a fricative. These sounds are affricates (Fromkin, 2003: 248). The palatal sounds that begin the words church and judge are voiceless and voiced affricates, respectively. Phonetically, an affricate is a sequence of a stop plus a fricative. Thus, the ch in *church* is the same as the sound combination [t] + [ʃ]. The sound of affricates are [tʃ] and [dʒ] for example: ‘chair’ /tʃeɪ/, ‘join’ /dʒɔɪn/.

6. Glide

The sounds [j] and [w], the initial sounds of you [ju] and woo [wu], are produced with little or no obstruction of the airstream in the mouth.²⁴ The [w] is formed by both raising the back of the tongue towards the velum simultaneously rounding the lips. For example: ‘we’ /wi:/. While the [j] is formed by the blade of the tongue is raised towards the hard palate in a position almost identical to that in

²⁴ Fromkin, *An Introduction to Language seventh edition*, 250.

producing the vowel sound [i] in the word ‘beat’
/bi:t/.²⁵

7. Liquid

When we pronounced liquid sounds, there is some obstruction of the airstream in the mouth. But, it is not enough to cause any real friction. Words like ‘please’ /pli:z/ and ‘price’ /praɪs/ consist liquid sounds which are [l] and [r].²⁶

D. Definition of Fricatives

Fricative consonants are with the characteristic that air escapes through a narrow passage and makes a hissing sound.²⁷ Fricatives are continuant consonants, which means that you can continue making them without interruption as long as you have enough air in your lungs. Additionally in the case of dental, alveolar and post alveolar fricatives, the front incisor teeth contribute to phonetic quality, since they

²⁵ Fromkin, *An Introduction to Language seventh edition*, 250.

²⁶ Fromkin, *An Introduction to Language seventh edition*, 250.

²⁷ Peter Roach, *English Phonetics and Phonology: A Practical Course (4th Ed)*, 50.

deflect the airflow coming from the constriction, producing some additional turbulence.

E. The Production of Fricatives

Friction can be generated in two ways in the vocal tract. One way is to produce a constriction of close approximation. To achieve this, two articulators are far enough apart so that air can pass between them, but close enough together so that when it does, it becomes turbulent and produces friction noise. This is how friction is produced for labiodental fricatives [f v] and dental fricatives [θ ð] (as in „think“ and „then“). The other way is to direct a channel of air at another surface, such the alveolar ridge, and when the moving air hits this surface, it becomes turbulent. This is how friction is produced for alveolar fricatives [s z] and post-alveolar fricatives [ʃ ʒ] (as in „ship“ and „pleasure“).

1. Labiodental Fricative

For labiodental fricatives [f v], air passes between the upper teeth and lower lip. Labiodental articulations are made with the upper teeth on either the outside or the inside of the lower lip. They do not sound very different from each

other and, as far as is known, no variety of English exploits the difference because they are made without involvement of the tongue.

Examples:

[f]- word-initial: *feet, father, fool, fail, photo*

word-medial: *affair, defend, offer, tougher, loafer*

word-final: *leaf, laugh, cough, stuff, roof*

[v]-word-initial: *veal, vat, vain, vice, voice*

word-medial: *ever, navy, over, silver, cover*

word-final: *leave, give, have, move, dove*

2. Dental Fricative

The fricatives [θ ð] can be made with the tongue blade attaches the upper teeth. In other varieties, the friction is generated against the back of the teeth and the tongue is held relatively flat so that the air escapes through quite a wide channel. This wide channel is what makes the fricatives [θ ð] so quiet in comparison with [s z]. In the case of dental fricatives, this is a wide area at the front of the tongue.

Examples:

[θ] word-initial: *thief, thick, thatch, thong, thought*

word-medial: *ether, ethics, method, author, anthem*

word final: *heath, smith, breath, path, cloth*

[ð] word-initial: *there, this, then, though, they*

word-medial: *breathing, leather, gather, father, mother*

word-final: *seethe, with, soothe, lathe, writhe*

3. Alveolar Fricative

In English, for instance, the letter „s“ is articulated as [z] when it comes out after the letter having the voiced sound, especially in the final position such as: „peas“ [pi:z], „knickers“ [nikəz], „mews“ [mju:z], „news“ [nju:z], „nowadays“ [nauədeiz].

The alveolar fricatives [s z] are made with a groove in the center of the tongue. This sound is made through with the center of the tongue attach the hard palate. The jaw is fairly close, so that the upper and lower teeth are close together.

Examples:

[s]-word-initial: *sat, sample, soon, soap, sign*

word-medial: *pieces, losses, essay, axes, concert*

word-final-s: *farce, famous, dose, ice, fierce*

[z]-word-initial: *zeal, zest, zoo, zone, zero*

word-medial: *easy, hesitate, bazaar, bosom, thousand*

in word-final clusters: *ribs [bz], heads [dz], legs [gz],*

limbs [mz],

4. Postalveolar Fricative

The post alveolar fricatives [ʃ ʒ] are made with a constriction that is further back than [s z]. Their place of articulation is described as palate-alveolar or post-alveolar. The tongue has a wider channel than for [s z], and it is convex behind the groove, rather than concave as for [s z]. Like [s z], [ʃ ʒ] can be produced with the tongue tip either up or down.

The phoneme [ʒ] in English rarely appears in the word initial and final positions. The phoneme [ʒ] occurs only in loan words, for instance in the word initial: „gigolo“ [ʒigəloʊ], „gigue“ [ʒig], „genre“ [ʒɛnrə],

„jalousie“ [ʒæluzi], and in the word final as in:
 „prestige“ [prɛstɪʒ], „barrage“ [bæraʒ] , „rouge“ [ruʒ].²⁸

Examples:

[ʃ] word-initial: *sheet, shed, shop, sugar, shout*

word-medial: *Asia, ashore, bushel, cushion, rashly*

word final: *dish, cash, wash, push, finish*

[ʒ]-word-initial-(in French loan words): *gigolo, gigue, jabot, genre*

word-medial: *pleasure, leisure, usual, confusion, decision*

word-final-: *barrage, rouge, beige, garage*

F. Sundanese Language

Sundanese language, as one of the regional languages in Indonesia and used by over 30 million people of western Java, has been making Sundanese language as the second largest regional language and the most widely used in Indonesia, after Javanese language.²⁹ The spread of

²⁸ A. C Gimson, *An Introduction to The Pronunciation of English* (England: J. W. Arrowsmith Ltd, 1975), 77.

²⁹Fakhri fauzan, *Error Analysis of Sundanese English Pronunciation on Fricative Sound*. Vol. 20, 205.

Sundanese language in Indonesia has fully supported by government. Each region has its own dialect of Sundanese. In Sundanese's world, there are some of the most popular Sundanese dialect as a follow: Sumedang, Cianjur, Ciamis, Sukabumi, Serang, Bogor, Subang, Tasikmalaya, Purwakarta, and Cirebon. This of course can be the cause that affect the student with Sundanese background error in pronouncing English.

In its development, the role of Sundanese language as a regional language has influenced by Indonesian language which has wider role than Sundanese language itself. The affection brings us to the fact that there is known Sundanese Kendonesen language, which means Sundanese that strongly influenced by Indonesian.³⁰ This is also involving media's role. The role of media on promoting the use of Indonesian language in the whole nation brings a significant impact towards regional languages including Sundanese language. Eventually, Sundanese language adopted many systems/rules and even vocabularies that are not popular and

³⁰ Fakhri fauzan, *Error Analysis of Sundanese English Pronunciation on Fricative Sound*. Vol. 20, 205.

have no equivalent or even have not known in Sundanese language to serve as a new basic guide and/or additional in terms of linguistics.

G. Sundanese Phonetics

The original alphabet in Sundanese language consists of 25 pieces with 7 vowels and 18 consonants.³¹ For more details, look at the table below :

Table 2.1 for Sundanese vowel

Vocal	Position			English equivalent
	Initial	Middle	Final	
/i/	/imah/	/pinter/	/lami/	/pin/
/eu/	/eurih/	/leungit/	/sampen/	/ago/
/u/	/ubar/	/bukti/	/sapu/	/put/
/e/	/era/	/capek/	/sae/	/let/

³¹ Fakhri fauzan, *Error Analysis of Sundanese English Pronunciation on Fricative Sound*. Vol. 20, 206.

/e/	/ema/	/geleber/	/halte/	/urgent/
/o/	/opak/	/cios/	/sato/	/open/
/a/	/arek/	/kamar/	/bapa/	/cut/

Table 2.2 for Sundanese consonants

Consonant	Position			English equivalent
	Initial	Middle	Final	
/b/	/bau/	/pecat/	/terab/	/back/
/c/	/cocok/	/ubar/	--	/catch/
/d/	/diuk/	/bedog/	/bejad/	/dog/
/g/	/guru/	/gagap/	/bedug/	/gap/
/h/	/hayang/	/dahar/	/badah/	/house/
/j/	/jalan/	/jajan/	--	/jar/
/k/	/kopi/	/kuku/	/letak/	/cab/

/l/	/loba/	/ilu/	/moal/	/line/
/m/	/mana/	/ambu/	/anom/	/milk/
/n/	/naha/	/menang/	/naon/	/nail/
/ny/	/nyieun/	/menyan/	--	/news/
/ng/	/ngan/	/angon/	/bujang/	/sing/
/p/	/poek/	/kupati/	/hilap/	/pan/
/r/	/rame/	/arek/	/acar/	/run/
/s/	/sapi/	/asem/	/tiis/	/send/
/t/	/topo/	/atah/	/saat/	/take/
/w/	/wayah/	/sawah/	/riceuw/	/walk/
/y/	/yakin/	/wayah/	/oray/	/young/

The use of foreign consonants can also be found in a number of borrowing words in Sundanese language. The use of these consonants is based on the absence of the sounds in Sundanese that can represent

the exact sounds of the origin language.³² This is limited only in terms of borrowing words which are directly borrowed into the language.

Tabel 2.3 Sundanese borrowed consonant

Consonant	Position			English Equivalent
	Initial	Middle	Final	
/f/	/fasilitas/	/tafsir/	/aktif/	/fact/
/q/	/qur'an/	/furqon/	-	
/v/	/vokal/	/lava/	-	/vocal/
/z/	/zat/	/azab/	/juz/	/zebra/

H. Contrastive Analysis

Contrastive analysis is a linguistic enterprise aimed at producing inverted (*i.e.* contrastive, not comparative) two-valued typologies (a contrastive analysis is always concerned with a pair of languages), and founded on the assumption that

³² S. P. Corder, *Error Analysis and Interlanguage* (Edinburgh: Oxford University Press, 1982), 5.

languages can be compared. ³³ from this contrastive analysis theory, researchers can find out that in the linguistic scope, language can be compared. Linguistic coverage here is related to the structure and use of language. Then the comparison of this language is more emphasized on the study of the structure that is most widely implemented is the structure phonological contrastive. And this is understandable because there is an assumption that phonology plays a role in second language learning. Sundanese, which only has stop sounds and does not have the fricative sounds as like [f], [v], [θ], and [ʃ].³⁴ And from Sundanese dictionary we can find out that Sundanese sounds does not have fricative sounds like [ð], [θ], and [ʃ].

Based on the tabel of Sundanese consonants above, the researcher can see that there is no consonant sound such as fricative consonant sounds in Sundanese sounds. So that it can make students with Sundanese background difficult and make some mistakes in pronouncing English words. Here are the

³³ Carl James, *Contrastive Analysis* (London: longman, 1980), 3.

³⁴ Fakhri fauzan, *Error Analysis of Sundanese English Pronunciation on Fricative Sound*. Vol. 20, 208.

table that contains English words with phonetics that are not in Sundanese and the researcher can see the contrast :

Tabel 2.4 sounds are not exist in Sundanese

Phonetic	Position			Sundanese Equivalent
	Initial	Middle	Final	
/ð/	/They/	/soothing/	/breathe/	-
/θ/	/thunder/	/birthday/	/worth/	-
/ʒ/	/genre/	/unusual/	/beige/	-
/ʃ/	/champagne/	/station/	/wish/	-

This situation certainly can trigger the occurrence of errors in pronunciation, especially in pronouncing English words of fricative consonants which is pronounced by students with Sundanese background. Can be seen in the previous tables that there is no fricative consonants sound in the Sundanese language as show in the table above, so that the sound becomes foreign to the tongue of students with

Sundanese background and can result in students with Sundanese backgrounds making mistakes in pronouncing the language English consonant fricatives.

Error is the side that has a flaw in the speech or writing of the language learner. These errors are part of conversations or compositions that deviate from the standard norms or selected norms of adult language performance. Teachers and parents especially mothers who have tried to win the fight for so long and are patient with the mistakes of the language of their students and children arrive at a conclusion, on a realization that making mistakes is an unavoidable part of learning.