PHONETICS AND PHONOLOGY IN ENGLISH
AS THE THEORY OF LANGUAGE PRODUCTION

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ABSTRACT


Keywords: Language, Production, Phonetics and Phonology

A. INTRODUCTION

Language is unique with reference to text and context. Both text and context cannot be separated between one and another to comprehend and produce meaning. No one language is better than other (s). Each of languages is better, best and unique with reference to the application of text and context as human production. Language production is process of conveying the meaning or experience in spoken and written language by of course the speaker or writer to who receives it and is said in process of listening or reading by listener or reader. The process of language production in this study is concerned to the speech production. A child and the closest family members need time, patient, and

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optimism. Because a child is born like a white paper, there is no dirt. It depends
on the closest family members to derive to what they want to be. So, we need the
theory of language production, that is phonetics and phonology. Phonetics is the
study of speech sounds; how they are produced in the vocal tract or production of
speech sounds, the study of the transmission and their physical properties, and
how they are perceived. Phonology is the study of the sound system of language;
how the particular sounds used in each language form and integrated system for
encoding information and how such systems differ from one language to another.

B. DISCUSSION

1. LANGUAGE

Language is a system of meanings, forms and expressions. It is
relevance with reference to the study of language (linguistics) in the periods of
linguistic behaviourism and cognitivism. O’grady and Drobrovolsky in
Contemporary Linguistics Analysis say that language is many things- a system
of communication, a medium for thought, a vehicle for literary expression, a
social institution, a Matter for political controversy, a catalyst for nation
building. All human being speak out at list one language and it is hard to
imagine much significant social, intellectual, or artistic activities taking place
in its absence. Each of us has a stake in understanding something about the
nature and use of language.

So, only by applying the language (text) to the social context, the
problem of language can be answered. That is, at the beginning of this
discussion I say that Language is unique with reference to text and context.
Social context represents text, and in turn, text presents social context. Both
text and context cannot be separated between one and another to comprehend
and produce meaning. No one language is better than other (s). Each of

2 O’Grady W., & Dobrovolsky M. Contemporary Linguistics Analysis. (Toronto: Coop Clark Ltd. 2000), p. 1

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languages is better, best and unique with reference to the application of text and context.

It can be understood that this language is as a humanity science. One person cannot be alive lonely. One needs other(s). It is to understand the resources that a language makes available to its native speakers, those who have acquired it as children in a natural setting (context). One communicates of course to another one(s). There, there are functions of each participants, one produces meaning, another one comprehends. That is again and again in the social life.

What man does by language is actually for giving and demanding information, good or service. To make the information, good and service (meaning or experience) in the truth, text (in case of phonetics and phonology will discuss the clarity of expressions in English and languages around in the core of this handbook) and context (in case of semantics, pragmatics and discourse analysis is the target of language) have to be one or fill one and another. It is like man and woman. Man cannot be isolated lonely and of course woman has the same case. But, each of them fulfils another weakness by strength in togetherness. This is important meaning that not one of them is weakness or strength whenever, wherever, whatever, however. But, by only togetherness, anything in the world will be ok, any problem will be solved.

However, togetherness in language means the relevancy of text and context. It can be seen in our social life, as long as they are not one to convey meaning, hardly social phenomena is longer and longer, sooner and sooner like boomerang. The language users will be in a risk causes by themselves. It is clarified by Cipollone, Keiser and Vasishth in Language Files book that language fills every part of our lives; it gives words to our thoughts, voice to our ideas and expression to our feeling. It is a rich and varied human ability-one we can use without even a thought, that children seem to acquire automatically, and that linguists have discovered to be complex yet
So, let us take a part of this language as the unique in our life and be best discussion.

Figure 1: Strata of Semiotics (Text and Context) in language

This language is like an egg. The yellow one is yellow of egg, not egg. The white one is white of egg, also not egg. But both are namely in one word, that is egg. It is what we say strata of semiotics (text and context). Text is denotative semiotics, and context is connotative semiotics.

Halliday holds language is a social phenomenon and also forms as a social semiotics. The mode of expression or may be also in graphology (written language) or signs in sign language or text. As language or text forms society, it involves in all its aspects simultaneously as the social changes or develops. The social aspects such as values, attitudes, belief etc serve as the external context to language, which is called social context.

Martin concludes that social context is comprised of the context of situation (register), culture (genre) and ideology. Figure 2 Language and its social context form a stratified semiotics with language (semantics, Lexicogrammar, and phonetics/graphology/phonology) as denotative semiotic, which has its own meaning and expression whereas the social

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3 Cipollone N., Keiser S. H. and Vasishth S. Language Files. (Columbus: Ohio State University Press, 2006), p. 1
5 Halliday, M.A.K. On Grammar. (London: Continuum (Edited by Jonathan J. Webster) 2005, 125

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context (situation, culture and ideology) as connotative semiotic which has its meaning only and consequently borrows the next semiotic below it to realize the meaning. The social context stacks up above language. The most distant and thus the most abstract element of social context to language is ideology. The nearest and thus the most concrete element is the context of situation and culture as the intermediate element. As indicated in Figure 2 the context of situation is the intermediate social context to semantics.

![Diagram of Language and its Social Context]

Figure 2 Language and its Social Context

Following, the semiotic principles, as indicated in Figure 2, ideology is realized by culture, which is realized by situation, which realized by semantics, which realized by lexicogrammar, which is finally realized by phonology/phonetics/graphology or sign. This is the consequence or system of how language is produced as in the following point.

2. LANGUAGE PRODUCTION

A baby for instance cries because she/he is wet. A bee performs its “wiggle dance” to inform others in the hive where nectar can be found. A cat scratches the door of the cupboard where the cat food is kept when she is

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hungry. A dog barks to be let out. A parakeet says, “Pretty Bird” as he views in the mirror. A child says “I hate the tofu, and I won’t eat it”.8

They above are expressions in productions of some life things to inform or convey their meaning to another. The question is, are they languages? Certainly, each example communicates a message to those who receive it. But, most of us distinguish that only last example truly exemplifies the use of language. What most distinguishes human language from these other communicative acts?

Gleason & Ratner say that human language is characterized by its hierarchical structure and all human languages express the full range of speaker’s experiences even imaginary ones.9 This means, Language has consequence of what is said and to what with reference to the language production.

It can be concluded that language production is process of conveying the meaning or experience in spoken and written language by of course the speaker or writer to who receives it and said in process of listening of reading by listener or reader. The process of language production in this study is concerned to the speech production.

Linguistic cognitivism around middle of 19th centuries until now such Chomsky, Halliday, Martin, Dudley-Evans, etc, concept this language as a production of mind, experience and ideology. Folks language and linguistic terminologies are describe such in Figure 3, that language is mind, experience, semiotics, production started from the meaning with reference to the social context as studied in semantics and pragmatics, which is realized by words, groups or phrases, clauses, sentences and text as studied in morphology, syntax or lexico-grammar, and finally which is realized by

8 Gleason & Ratner. Psycholinguistics. (United States of America: Harcourt Brace College Publisher, 2005), 4

9 Ibid. p. 5

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expressions in terms of symbol and sounds as studied in phonetics/graphology and phonology.

If I relate language production to the social context in term of man and woman in the world, especially Indonesian people and in case of woman emancipation toward man, this is well-known impossible as same as. Why? It can be seen in the expressions of man and woman that man has straightest than woman in one case but of course weakest in other case (s). With reference to the study of phonetics and phonology, intonation (sound) of man and woman are different. The differences can be seen when man and woman are saying like in singing a song, the key such sound “C”, when this sound is sounded higher by man, woman’s sound will be lower. In the other hand, when this “C” sound is higher sounded by woman, man’s sound will be lower.

Figure 3:
Folk Language and Linguistics Terminologies based on Linguistic Cognitivism View around 19th Centuries until now

Further, a man or a woman cannot be alive lonely or in isolation. Saragih reveals that:

A man or a woman as representation of social phenomena means man or woman is born by interaction or production of

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two individuals (father and mother) and thus a man or a woman cannot be alive lonely or in isolation because his existence involves two individuals, so right from the beginning, a man or a woman has to interact with his father and mother.10

Then, a man or a woman has to be tailed in the social interaction to fulfil his need. No one can fulfil his need lonely. A man or a woman needs a tailor to create clothing, food seller to have food, physician or doctor to treat the disease (his/her heart is sick), etc. Thus, they must interact.

Finally, only a man and woman are given an ability to tell his/her story or experiences to other (s). It thinks out an idea of history. In the other hand, animals (chicken, caw, and buffalo) have no this ability and of course have to be no ability to inform experience to other (s) because it is much danger to human being. If a chicken sees its mother or brothers is slaughtered by the owner for expression of gratitude to God or party and is able to tell the event to its friends or brothers, absolutely every chicken will not want to be taken care of by human being again. Ants and mosquitoes will together colonize human being.

Let us use the term “speech” as the cover of language production. In the act of speaking, the speaker adopts for himself a particular speech role, and in so doing assigns to the listener a complementary role which he wish to adopt in his turn. Halliday states: “the most fundamental types of speech role, which lie behind all the more specific types that we may eventually be able to recognize are just two: (i) giving; (ii) demanding. These two types absolutely are done in the interaction of language production in speech production.”11


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I concern this study because of this speech production is studied in one of major studies of linguistics, that is phonetics and phonology. This study is very important for the beginners of language study especially English. English as an international language is used to communicate with the people around the world. However, this language affects the situation of language users over the countries. Such Indonesian country, English is a foreign language.

Again I perceive that no one language is better than other language(s). Why? For Indonesian people, even though we must study English as a foreign language, but we have to much love Bahasa Indonesia as a national language. Then, even though we much love Bahasa Indonesia, we have to much better love regional language, such me here; I use Bahasa Angkola as my first language.

The evidence is seen in the Indonesian Youngster’s Promise:

(i) Kami pemuda-pemudi indonesia,
    Berjanji, berbangsa satu, bangsa Indonesia;

(ii) Kami pemuda-Pemudi Indonesia,
    Berjanji, berbahasa satu, bahasa Indonesia;

(iii) Kami pemuda-pemudi Indonesia,
     Berjanji, bertanah air satu, tanah air Indonesia.

Above, they show that the study of English phonetics and phonology will be as diversity for Indonesian people. Why? Because no reason that Indonesian people can use English as the first language. There are many languages in Indonesia. Each of languages has many differences. But, Indonesian regional languages are branches of Malay language. So, this study will discuss the standard of English as a foreign language such Received Pronunciation (RP) and International Phonetic Alphabet (IPA) with reference to the Teaching English as a Foreign Language, History of English and Varieties of English.
3. TEACHING ENGLISH AS A FOREIGN LANGUAGE

Some ways of teaching foreign languages adopted from the book are not necessarily methods: they may be simply collections of some lessons of teaching experiences.\textsuperscript{12} It is not strange for us to distinguish why such a child can speak his mother tongue, because he is tough by the closest family members firstly such his father, mother and brother or sister. That language is namely first language for that child. But, however the child and the closest family members need time, patient, and optimism. Because a child is born like a white paper, there is no dirt. It depends on the closest family members to derive to what they want to be.

Gleason & Ratner say that adults have always been fascinated by the almost miraculous unfolding of language in children.\textsuperscript{13} Although they we were born completely without a language, by the time they are 3 or 4 years old, children typically have acquired thousands of vocabulary words, complex grammatical and phonological system, and equally complex rules for how to use their language appropriately in many social setting.

Above, we have understanding that in teaching language especially the language is foreign for the learners, of course we have to be patient and always be optimism to cover the learners. English as a foreign language for Indonesian people is absolutely different if we compare to Bahasa Indonesia, even though the structure of the speech acts are similar and unmarked, and in regional languages especially Angkola language. It can be seen the differences in the following examples:

**In Sentence**

Declarative sentence or declaration, the most common type, commonly makes a statement:

\textsuperscript{12} Setiyadi, A. G. *Teaching English as a Foreign Language.* (Yogyakarta: Graha Ilmu, 2006), p. 1

I go home  
Saya pulang ke rumah  
Got mulak au tu bagas  

Negative sentence or negation denies that a statement is true:

I do not go home.  
Saya tidak pulang ke rumah  
Na got mulak au tu bagas.  

Interrogative sentence or question is commonly used to request information, but sometimes not; see rhetorical question:

When will you go to work?  
Kapankah kamu akan bekerja?  
Andigan do get karejo hamu?  

Exclamatory sentence or exclamation is generally a more emphatic form of statement:

What a wonderful day is today.  
Betapa indahnya hari ini  
Na jogi ma hari sadarion bah.  

Imperative sentence or command tells someone to do something:

Go to work at 7:30 tomorrow!  
Bekerjalah jam 7.30 besok!  
Karejo ho jam 7:30 ancogot!  

The examples show the differences in the forms of sentences by structures and by purposes. However, the core of those forms is to interact between a speaker and listener and writer and reader to have the meaning and language as the medium.

In this globalization era, every country takes a part for their existence to have education, business, good, etc. So, we need an international language as the medium to do such the globalization era. Because there many people will go to the overseas inter-project, that is English
English must be studied by Indonesian people as the foreign language in order; Indonesian people can be challenged for the future especially the modality and probability to execute the national concerns, Pancasila and The policy of 1945, in this case is about education and economy.

We see that English now has been studied right from elementary, junior and high schools. The curriculum of education in Indonesia refers to KTSP (Curriculum of education unit level). Especially English, The material of English now lays on the text and context in for skills, reading, listening, speaking and writing.

I specify the study in the production of language in spoken language. Why? To see the fluency of Indonesian people use English as a foreign language, especially for people in Angkola, Padangsidimpuan. Again we remember that no one language is better than other(s). So, in teaching English as a foreign language for people in Angkola, padangsidimpuan, I refer my model to the study of phonetics and phonology to drill their pronunciation to be Receive Pronunciation (RP) based on the International Phonetic Alphabet (IPA). To see the English Received Pronunciation (RP) and International Alphabet (IPA) chronologically, we shall see in the following chapter introduced by phonetics and phonology, then in history of English and varieties in English.

4. PHONETICS
Since Language and languages became an object of study by the ancient, the term has had many and different definition. Language word derives from Latin lingua (language,) with a reconstructed root of tongue, a based on the use of the physical organ in. Language is spoken to a hearer by a set of sounds that is the speaker encodes or sends.

Language is a particular kind of encoding and decoding. Then linguistics is the scientific study of a natural language. Language is namely
study of structure (grammar), the study of meaning (semantic and pragmatics),
the study of word (morphology), and the study of symbols and sounds
(Phonetics and phonology).

You probably want to know what the purpose of this paper is, and what
you can expect to learn from it. An important purpose of this paper is to
explain how English is pronounced in the accent normally chosen as the
standard for people learning English Spoken as an international language. If
this was the only thing the course did, a more suitable title would have been
“English Pronunciation”. However, at the comparatively advanced level at
which this course is aimed it is usual to present this information in the context
of a general theory about speech sounds and how they are used in language;
this theoretical context is called **English phonetics and phonology**.

Why is it necessary to learn this theoretical background?

The same question arises in connection with grammar: at lower levels of
study one is concerned simply with setting out how to form grammatical
sentences, but people who are going to work with the language at an advanced
level as teachers or as researchers need the deeper understanding provided by
the study of grammatical theory and related areas of linguistics. The
theoretical materials in the present course necessary for everyone who needs to
understand the principles regulating the use of sounds in spoken English.

Phonetics is physical manifestation of language in sound waves, how
sounds are articulated and how sounds are perceived. Phonetics perceives
Language as independent that study of all sounds. A variety of speech sounds
can be produced in terms of another way of air stream change – Articulation.
Articulation is done mainly somewhere at vocal tract.

So, phonetics is the study of speech sounds; how they are produced in the
vocal tract or production of speech sounds (articulatory phonetics), the study of
the transmission and their physical properties (acoustic phonetics), and how
they are perceived (auditory phonetics). Phonetics is concerned with the
physical properties of speech sounds. It is subfield of linguistics which deals with the description of speech sounds. The elements of phonetics is vowel, short vowel and long vowel, diphthong, triphthong, consonant, syllable, length, stress, tones, intonation, vocal tract articulation, place of articulation, and manner of articulation. Meanwhile, phonology goes on to discuss the phonemic of them in the next chapter of this discussion.

We do not need to speak in order to use language. Language can be written, recorded, mechanically, and even produced by computers in limited ways. Nevertheless, speech remains the primary way humans encode and broadcast language. Ours species spoke long before we began to write language down, and as we saw, spoken language is reflected in our anatomical specialization for it. Human also appear to have specialized neural mechanisms for the perception of speech sounds. Because language and speech are so closely linked, we begin our study of language by examining the inventory and the structure of the sound speech. This branch of linguistics is called phonetics.

Part of our linguistics competence has to do with our knowledge of the sounds of our language. We know how to produce them though we may have never had to really think about the mechanics of doing so. Imagine, for instance that we are trying to describe to someone else how the first sound in the word the is pronounced (the, by the way, contains only two sounds). Or suppose we had to explain the differences between the vowels in the words bat, beat, and boot. We have probably been producing these sounds for years without having to think twice about them.

Phonetic transcription however is consistent and unambiguous because there is always a one-to-one symbol correspondence between sounds and symbols. This is even true across languages, so that the symbols we shall be

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14 O’grady & Dobrovolsky, Op. Cit., p. 15
15 Cipollone, Keiser & Vasishth, Op. Cit., p. 8
learning can be used to transcribe the sounds of any language. Phonetic symbols are written in square brackets, [ ], to distinguish them from letter or words written in ordinary orthography. It is important to remember that these symbols are not same as letters, and that they represent the sounds of language, not letters of a writing system.

This course is written to students who study English as a foreign language. As a reference to distinguish phonetics transcription is International Phonetic Alphabet (IPA) and Received Pronunciation (RP). Both International Phonetic Alphabet (IPA) and Received Pronunciation are English standard. Standard is a level of quality, especially a level that is acceptable. It means that standard is the minimal and maximal of quality of speech sound, in this case is English as a foreign language. Let see the elaboration of English standard in form of International Phonetic Alphabet (IPA) and Received Pronunciation (RP) below.

a. INTERNATIONAL PHONETIC ALPHABET (IPA)

International Phonetic Alphabet like many books have studied is as the reference of this discussion to decide the phonemes (symbols of sounds). It may be found in British English and American English. British and American English also refer to this IPA. However, there will be different accents in comprehending and producing the symbols and the sounds in practice, but not go away from IPA.
Let see the IPA taken from Roach!¹⁶

b. RECEIVED PRONUNCIATION (RP)

As we have already mentioned, Revived Pronunciation (RP) is normally taught to students who are studying English (this is the accent which is described, for example in most other English textbook). There are advantages to learn particular accent. First, while it originated in the South-East England, it is now a genuinely region less accent within Britain; if speakers have RP accent, you cannot tell which area of Britain they came from (which is not the case for any other type of British Accent). This means that this accent is likely to be encountered and understood throughout the country.

Second, RP is the accent which is used most often in radio and television broadcasts in England, so a student will have many opportunities to listen to it.

Further, there are also disadvantages to learn only RP. First, it is an accent used natively by only 3 to 5 percent of the population of England. This means that students arriving in England for the first time may have difficulty, sometimes a great deal of difficulty, understanding the other 95 to 97 percent of the population. Second, while RP is not a regional accent, it is a social accent, associated particularly with the upper-middle and upper classes (and those who aspire to those classes). Foreigners of English who are very successful at acquiring an RP accent may therefore be reacted to as if they were upper-classes and the reaction might not always be favourable. Thirdly, the RP accent is probably rather more difficult for many foreigners to acquire than. Let talk and see the RP accent in forms of Vowel and Consonant systems!

The RP Vowel System is presented and can also be heard on the recording. While RP does not have any regional variation, as we have said, it does have variation in another type. In particular, there is variation between some writers have called ‘conservative’ and ‘advanced’ RP. For the most part this reflects linguistic changes that are currently taking place in RP, with ‘conservative’ pronunciations being most typical of older speakers and ‘advanced’ pronunciations typically younger speakers.

This RP is my reference to describe English sounds and symbols especially vowel and consonant in the usage of English as a foreign language taught in Indonesia. So, you may differ my description to RP and also to International Phonetic Alphabet (IPA) to see the varieties. These varieties will be discussed in the end of our study in the study of History and Varieties of English.
5. PHONOLOGY

Phonology comes from Ancient Greek “phone” (voice sound) and “logos” word, (speech subject of discussion). Phonology is the study of the systems of sounds and sound combinations in a language. It is concerned with how these sounds are systematically organized in a language; how they are combined to form words, how they are categorized by, and interpreted in the minds of speakers (the word phonology itself comes from the Greek word phone, which means “voiced”).

The study of phonology in the Western tradition goes back almost 200 years, to the early 1800’s, when European linguistics began studying sound change comparing the speech sounds in a variety of related languages. However, the emphasis in modern phonology, as it has developed over the last 30 years, has been primarily on the psychological system that underlies pronunciation, and secondarily on the actual physical articulation of speech.

So, phonology is the study of the sound system of language; how the particular sounds used in each language form and integrated system for encoding information and how such systems differ from one language to another.

6. PHONEMICS

The concept of phoneme was introduced as the abstract unit of speech sounds. And a few theoretical problems connected with phonemic analysis have been mentioned in other discussion. The general assumption (as in most phonetics books) has been that speech is composed of phonemes and that usually whenever a speech sound is produce by a speaker it is possible to identify which phoneme that sound belongs to. That is we say Phonemic is the study of sounds and the influences of the surrounding sounds, even previous and the next sounds. While this is often true, we must recognise that there are exceptions which make us consider some quite serious theoretical problems. From the comparatively point of view of learning pronunciation,
these problems are particularly important. However, from the point of view of learning about phonology of English they are too important to ignore.

C. CONCLUSION

Language as human experience production is unique with reference to text and context. Both text and context cannot be separated between one and another to comprehend and produce meaning. No one language is better than other(s). Each of languages is better, best and unique with reference to the application of text and context as human production. Language production is process of conveying the meaning or experience in spoken and written language by of course the speaker or writer to who receives it and is said in process of listening or reading by listener or reader. The process of language production in this study is concerned to the speech production. A child and the closest family members need time, patient, and optimism. Because a child is born like a white paper, there is no dirt. It depends on the closest family members to derive to what they want to be. So, we need the theory of language production, that is phonetics and phonology. Phonetics is the study of speech sounds; how they are produced in the vocal tract or production of speech sounds (articulatory phonetics), the study of the transmission and their physical properties (acoustic phonetics), and how they are perceived (auditory phonetics). Phonology is the study of the sound system of language; how the particular sounds used in each language form and integrated system for encoding information and how such systems differ from one language to another.
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