## **CHAPTER I**

### INTRODUCTION

### **1.1 Background of the Study**

English is known as world language. It is used by many people in this world. It is usually used as lingua franca. Lingua franca usually called a contact

language, as firth (1996) has demonstrated:

"ELF as a 'contact language' between persons who share neither a common native tongue nor a common (national) culture, and for whom English is the chosen foreign language of communication (firth 1996, quoted in Smit 2010, p. 23)

There are many groups of people who use English. It is used by native

speakers versus non-native speakers or native speakers versus second language

speakers and also foreign language speakers, as Smit (2010, p. 50) stated:

"All of them use the much more established terminology of either native vs. non-native speaker (NS – NNS) and/or first language/mother tongue (L1) vs. second and foreign language (L2, FL)" (Smit, 2010).

In other Hand, Smit also said that English have unique status as world language,

as Smit (2010, p. 45) stated:

"English can justifiably be given a unique status amongst all languages used on our planet today. Similar to all other (socio) linguists, I also feel the need to relativize this statement by stressing that this uniqueness, which has widely been identified by the label 'global' or 'world' language" (Smit, 2010).

English as world language means that English is not only used by native

speakers but also used by many people in this world. As the proof, it is known

that 56 % of international news broadcasting and the internet web used English, as (Sigurbjörnsson, Kamps and de Rijke, 2005) stated:

"English is still 'in the lead' in international news broadcasting and the internet, with an estimated 56% of web content in English in 2002 (Sigurbjörnsson, Kamps and de Rijke 2005, quoted in Smit 2010, p. 46).

In other hand, Smit (2010, p. 45) also said that English used as global communication systems included many aspects, such as communication for international business, trade and transport, international research, education and (mass) culture. So, to face this globalization, it is important to non native speaker of English to learn English as their second language or foreign language as good as possible.

It is not surprising to find an increase in English language use and learning (Smit: 2010, p. 46). Such as In Indonesia, English becomes foreign language that was learned by most of Indonesian. It becomes foreign language because their first language that is used is their own regional language and their second language is Indonesian. Even though, English became foreign language that learned in school. In this case, there are many aspects that must be considered in teaching English as foreign language. They are language skills and language component. Here, Language skills include listening, speaking, reading, and writing while language component include pronunciation (Rohmah: 2012, p. 4).

In this case, Goodwin (2001) said that the most important aspect of language that learned by second language (L2) learners is pronunciation. It becomes important because it is necessary to gain successful communication. In other hand, Harmer (2001, p. 183) said that awareness of pronunciation will give two advantages. The first is for speakers own production and the second are for speakers' understanding of spoken English. It means that the way to pronounce language is very important. So, it is important that foreign language speakers have to learn phonology to gain successful communication. Phonology is the study about language sound. According to Poole (1999, p. 55) phonology is studies sound in the context of language

One of phonology branch that have important role to get a better pronunciation are phonemics. It becomes important because phoneme is smallest units of speech in a language that distinguish one word from another (Oxford 7th Edition, 2010). It means that measurement of phoneme sound is very important to help us differentiate one word with the other word and gain successful communication.

Vowels have a big deal in foreign language acquisition because we know from O'connor that Native speakers of English accent were differentiated by the sound of vowel, as O'connor (1995, p. 2) stated:

"Native speakers of English from different parts of the world have different accents, but the differences of accents are mainly the result of differences in the sound of vowels; the consonants are produced in very much the same way where English is spoken (O'connor, 1995)".

In this case, Harmer (2001, p.184) said that the particular problem in pronunciation teaching and learning is what students can hear. It means that students have difficulty to hear pronunciation feature which the teacher want them to reproduce. So, because of this reason the writer know that it is important to measure English vowel sound. It is known that measuring English vowel is not enough by using our hearing. It happens because we are not native speaker of English who know to pronounce correctly. For example, the writer is get difficulty to differentiate the vowel phoneme in cat and ten. This problem occurs because as foreign language speaker, we are not using English in daily life (Rohmah: 2012, p. 2).

Based on the explanations above, the writer wants to measure the EFL university student ability of pronounce English vowels using praat software. It is an instrument that is used for analyzing physical sound. It program is designed by Paul Boersma and David Weenink of the Institute of Phonetics Sciences of the University of Amsterdam. Its home page is www.praat.org or www.fon.hum.uva . The writer analyses the acoustic characteristic of English vowel produced by EFL university students called formant in the spectrogram. It is chosen because the writer considers that Vowel quality is based on the frequency of formant 1 and formant 2 based on the average formant frequency of American English vowel. The average formant was chosen because the writer considered that it is difficult compare acoustic data on the sounds of one individual with another. Even, it is known that Phoneticians do not really know how to compare acoustic data on the sounds of one individual with those of another (Ladefoged and Johnson, 2011). This research also was in accordance with article "How to Measure Vowel Formants Using praat" by Richard Wright and David Nichols University of Washington Phonetics Lab on 25 June 2009. They said that Vowel quality is based (largely) on our perception of the relationship between the first and second formants (F1 & F2). Ladefoged and Johnson (2011, p. 187) also said that quality of vowel was distinguished by the difference in formant.

This kind of research also has done previously by some researcher. One of them is Japanese, Kazuya Saito. He measure vowel æ and a in some words though formants using praat in his research.

# **1.2 Statement of the Problems**

- 1. What are the formant values of English vowel produced by EFL university students of UIN Sunan Ampel Surabaya?
- 2. How does the English vowel quality of EFL university students of UIN Sunan Ampel Surabaya based on the acoustic characteristics through their formant frequencies?

# **1.3** Objective of Study

- 1. To know the formant value of English vowel produced by EFL university students of UIN Sunan Ampel Surabaya.
- To know the English vowel quality of EFL university students of UIN Sunan Ampel Surabaya based on the acoustic characteristics through their formant frequencies.

### **1.4 Significance of the Study**

The research is useful for many groups of people, such as students, further researchers who want to do the same kind of research, and other readers.

For students, the research enriches their knowledge about one of three points in phonetics called acoustic phonetics. Besides, it can also be used as an example of research on phonetic especially acoustic phonetics. It also gives them new information about one of software that can be used to analyze or measure sound (acoustics). So, they can learn something new through praat software. Besides, the research also became one of example how to measure vowel quality.

Principally, for further researchers who want to measure some phonological aspect using praat Software. Besides, the research also gives information about praat software. It is very important because praat is one of tool that can be used to get the measurements or to analyze physical properties of speech and phonetics that they need and desire for their research. Ultimately, the research became useful reference for further researchers who doing the same kind of study.

The last, the research also enrich knowledge about acoustic of vowels produced by EFL students in UIN Sunan Ampel Surabaya. It means that the research give us new information or knowledge about vowel quality of EFL students in UIN Sunan Ampel Surabaya.

## **1.5 Scope and Limitation**

The research focuses on the English vowels  $/\alpha$ / and /e/ from words that were derived by Indonesian EFL university students in English Letters, State Islamic University of Sunan Ampel Surabaya. The participants consisted of 16 students who were on the eight semester. It is chose because the writer considered that 16 students are enough to represent object of the research. It was in accordance to Mahsun (2013) in metode penelitian bahasa. He said that language research do not need a big sample but it needs sample that represent social group that was become data resource.

"Dalam penelitian bahasa sampel yang besar tidak diperlukan,... Namun, yang paling penting diingat ialah bahwa setiap kategori kelompok social yang dijadikan variable independen harus terwakili didalam sampel yang dijadikan sumber data (Mahsun: 2013)"

"Big sample in the linguistic research is not needed,... the most important to remember is we have to put every social group that was included in the independent variable in the data source (Mahsun: 2013)"

### **1.6 Definition of Key Terms**

Acoustic phonetics: the study of the acoustic characteristics of speech, including

an analysis and description of speech in terms of its physical properties.

Sometimes restricted to instrumental analysis and measurement sound waves

(Clark and Yallop, 1995)

Acoustic: the scientific study of sound and how we hear it (Clark and Yallop,

1995)

**EFL:** English as foreign language (Smit, 2010)

**ELF:** English as lingua franca (Smit, 2010)

**Formant:** the overtone pitches that give it its distinctive quality in sound (Ladefoged and Johnson, 2011)

**Phoneme:** smallest units of speech in a language that distinguish one word from another.

**Phonetics:** the scientific study of speech production that concerned with articulatory phonetics, acoustic phonetics, and auditory phonetics (Aarts, 2006) **Phonology:** studies sound in the context of language (Poole, 1999)

**Praat Software:** computer software that used for analyzing speech (www.praat.org).

**Spectrogram:** The display produces of component of sound in computer program (Ladefoged and Johnson, 2011)

Vowel Quality: the timbre of a vowel (Ladefoged and Johnson, 2011)