CHAPTER III

RESEARCH METHOD

This chapter presents description of how the researcher conducted the study to find out the phonological interference on students' speaking ability of fourth semester students at UIN Sunan Ampel Surabaya. The research method includes research design, research setting, subject of the study, data collection technique, research instrument, data and source data, and data analysis technique.

A. Research Design

This study used descriptive approach. This method is applicable for this study due to the objective of this study is to describe kind of phonological interference in spoken English performed by Javanese speakers of students in fourth semester of English Teacher Education Department UIN Sunan Ampel Surabaya. This is in line with Marthyn conducted research with descriptive approach through observing and describing the phenomenon without doing any intervention.[1] Moreover, this study used qualitative research which is more concerned with meaning.[2] Qualitative research uses data in a word description to answer the research question. Therefore, this study used descriptive qualitative research.

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[1] S, Marthyn, *Descriptive Research Design*. (http://explorable.com/descriptive-research-design , accessed on December 16th, 2015)

[2] H. O'Connor, N. Gibson 'A Step by Step Guide to Qualitative Data Analysis'. *Pimatiziwin: A Journal of Aboriginal and Indigenous Community Health*. Vol.1.No.1. 64-90

B. **Research Location**

This study is conducted at UIN Sunan Ampel Surabaya especially at Speaking for Formal Setting Class which is taken by fourth semester students of English Teacher education Department.

The researcher location is chosen because in English Teacher Education Department, the students are not native of English Language and as expected found that some of them are Javanese speakers using Surabaya Dialect therefore this study could be done on this location. Moreover, as future teacher they are expected to be a good teacher by giving appropriate lesson by using English language, however errors production on speaking ability are still found.

C. **Subject of the Study**

Subject of this study is fourth semester students of 2014-2015 academic years who take speaking class. There are four speaking class are taken by fourth semester students, they are *Formal Setting A, B, C, and, D* class. Every class consists of 30 less or more students. The subject chosen is considered as Javanese speaker who acquires English as second language and who takes English for formal setting class. Furthermore, the number of Javanese speakers of each class is approximately 15 to 20 students. However, the researcher has chosen 35 Javanese speakers who use Surabaya dialect as valid subject; the other Javanese dialect speakers are not involved. This has been known after conducting observation and delivering

questionnaire in the first week of June 2016. The recapitulation of choosing subject described in the appendices.

Furthermore, the reason why the researcher conducts this study on fourth semester students is because they have taken phonological course which discusses about phonological system in English. Furthermore, four basic English skills have been acquired by the students in the previous semester. It means that they have had well knowledge on English, this study wants to find whether phonological interference on students' speaking ability which then results on errors and mistakes production.

D. Data Collection Technique

This study aims to find the kind of phonological interference in the spoken English by Javanese speakers. As effort to find depth information about the phenomenon of phonological interference on Javanese speaker in spoken skill, this study used several techniques to collect the data from the subject of the study. Those data collection techniques are observation, questionnaire and audio-recording.

Data of the research was collected through the following steps.

1. Observation

Observation becomes appropriate technique for collecting data from the subject of the study in the first action. To understand the condition in the field which experienced by the subject, observation becomes appropriate initial action to comprehend the situation. Observation lets the researcher to see and observe what

exactly things occurred in the field. The researcher joined the studied class to see any activity and interaction of the students, while keeping notes during the observation.

During the last week of May and the first week of June 2016, the researcher conducted observation. The researcher conducted the observation on only three classes of Speaking for Formal Setting because the limited time, and only once on those classes to observe students' attitude in speaking performing. This condition may seem enough for gathering initial facts or situation of the class as preparation to collect the main data using record technique while another class is observed while conducting record technique. The researcher joined the class sitting on the back while keeping notes to gather the initial information from the students. The note contains the information regarding on specific facts of what happened during students' performance in class and personal response to the facts happened during students' performance.

2. Questionnaire

Questionnaire becomes supported technique to help the researcher choosing the subject. To this study, the chosen subject is fourth semester students who take speaking for formal setting class, moreover, she or he who is Javanese speaker using Surabaya dialect. Paper-based questionnaire consisting of twenty questions has been delivered to students during the first week of June, 2016 to know the students' language background.

3. Audio-recording

Audio-recording becomes main technique to collect the data. As effort to find the phenomenon of phonological interference on the subject, audio-recording supports the researcher to provide the finding data in the field. The audio-recording contains any utterance even speech made by the students. During the second and third week of June 2016, the researcher joined four speaking classes again to collect the data through recording. Fortunately, during that time, the researcher could record students' performing speech one by one for final examination. The length of the audio-recording is 4 to 6 minutes contains students' speech which analyzed then.

E. Research Instrument

Research instrument is kind of tools to collect data. The instrument should be valid and reliable to obtain expected result. Therefore, the chosen research instruments become one of crucial activities in doing research. To make this relevant to the data collection before, appropriate instruments have chosen as a tool to collect the data.

1. Note

For observation activity, the researcher used filling note as instrument. During observation done on speaking classes, the researcher as participant sitting in the back joined the speaking class, and then taken note of students' performance in the class. Furthermore, the note consisted of any information of students' performance in the class include their language background or their mother tongue

and their performance in speaking; how far the students made error productions in the spoken English language.

2. Questionnaire

The researcher delivered questionnaire for students in fourth semester who take speaking for formal setting class. The questionnaire consists of twenty questions which expected to be answered by the students. The questionnaire contains the questions which to know students' language background. The examples of the questions are described as follow.

a. At what age did you first begin to learn English?
b. At what age did you first begin to learn Indonesian?
c. At what age did you first begin to learn Javanese?
d. At what age did you first begin to learn _____?
e. What language did you hear in your home between the ages of birth- 5 years?

Those are the examples which are consisted at the questionnaire and the complete questions are described in appendix. Delivering this questionnaire is hoped to give information who are Javanese speakers.

3. Audio-recorder

To collect data needed, the researcher recorded students' performance in class. Fortunately, the final examination was conducted when the researcher joined the four speaking classes during second to fourth week of June 2016; the students performed speech on the theme chosen in 4 to 6 minutes. Therefore, the researcher could record students' performing speech one by one in class. The researcher used recorder application on personal mobile phone to record students' performance. This audio

recorder seems applicable to collect the data because the researcher has already used it before and the output is clear enough. If there is some audio file consisting noise or they are not clear enough, the researcher used other audio software to get the clearer output for instance the audacity which is also used in this study.

4. Mp3 Converter (Format Factory)

The researcher used Format Factory application to convert the audio-recording file which taken from personal mobile phone to mp3 format. For the reason, the researcher needs to analyze the audio-recording file in mp3 format to be easy as in analyzed by the researcher even another software. The audio-recording files taken from personal mobile phone are still in 3ga format; therefore, the files need to be converted to mp3 format.

5. Audacity

Audacity helps the researcher to transcribe the audio files. To find indicated errors production made by the students, the researcher transcribed the students' speech into phonetic transcription compared to the dictionary. This application supports slow and speed the audio to help transcription activity.

6. Mp3 cutter

The researcher used mp3 cutter to select and cut the students' utterance in a word. For the reason that the data which to be analyzed is word, the researcher need to cut the audio into word. The data in form of a word will be identified containing

phonological interfered then it could be classified into four phonological interference classification made by Weinrich.

7. Collins Cobuild dictionary

The researcher used Collins cobuild dictionary is kind of digital dictionary consisting native pronunciation to compare students' utterance and the right pronunciation while transcribing the audio. The dictionary contains the native utterance and phonetic transcription to show the right pronunciation in producing English word.

F. Data and Source Data

Data has crucial role to answer research question to this study. The data gathered through collecting data techniques using appropriate instruments. As mentioned before, the researcher conducted observation, questionnaire and audio-recording as effort to collect the data. The data of the study include the result of observation in a form of researcher's note from students' speaking performance in the class. The data of audio-recording technique in the form of audio files gathered by recorded students' performing speech in the class. Those data analyzed by researcher to find phonological interference which then influences the speaking production made by students.

G. Data Analysis Technique

Concerning data analysis technique, the writer will use Hurberman's concept. Huberman's data analysis techniques concept includes; data reduction, data display, and conclusion drawing.[3]

Developing Huberman's concept, the steps of data analysis technique are as follow.

1. After collecting data through observation and audio-recording, the data are investigated and reduced as is needed. The researcher chosen the audio-recording made by Javanese speaker which analyzed then while the other is omitted.

2. Converting the audio files from personal mobile phone which are still in 3ga format to mp3 format. Therefore, this audio is easier to be analyzed by the other software even the researcher.

3. Transcribing the students' speech into text. The researcher used audacity to play the audio while comparing to Collins cobuild dictionary to transcribe the students' speech into phonetic transcription form. The students' transcriptions are showed in appendices.

4. Indicating error production then consulted to Collins cobuild dictionary again and some expert of English language to strength the validity of the data.

5. Selecting and cutting the indicated word contains phonological interference to be focused analization. The selecting data are showed in a table to be compared with the right pronunciation according Collins cobuild dictionary.

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[3] Denzin & Lincoln. *Handbook of Qualitative Research.* (Thousand Oaksca: Sage, 1994). 429

6. Identifying and classifying the data using phonological interference classification made by Weinreirch. The data categorized as four types; they are under-differentiation of phonemes, over-differentiation of phonemes, reinterpretation of distinctions, and actual phonic substitution.

7. Identifying the factors resulting on phonological interference made by the students. The researcher interprets the factors result the phonological interference on students' speaking ability by consulting on Weinrich theory and the students' answered questionnaire. In the chapter two, the researcher has compared Javanese phonological system and English phonological system to investigate the different system of both phonological rule, therefore, the factor resulted phonological interference on students' speaking ability could be determined and the second question is able to be answered.