CHAPTER III
RESEARCH METHODOLOGY

3.1 Research Design

This study is an error analysis study which use descriptive approach. It is focus on finding the fact and information about students’ errors based on the theory of surface strategy taxonomy proposed by Dulay et al (1982) in the narrative text. This study focus on identifying the frequencies of occurrence of errors based on surface strategy taxonomy and possible causes of errors made on it. So, it is conducted using quantitative and qualitative or mixed method design.

This error analysis study tries to use mixed method design, which conducted quantitatively and qualitatively (Denscombe, 2007:107). The researcher uses this design to conduct the analysis of errors. The quantitative applies to count the most frequent errors while the qualitative applied to interpret and explain the result of the data analysis.

3.2 Source of Data

The researcher did preliminary study which aimed to find out the English teacher of state of junior high school who used surface strategy taxonomy analysis theory in analyzing the errors made in students’ written text. The school that had been found by the researcher became the source of data for this study. The source of data in this study had been taken from SMPN 1 Cerme and SMPN 2 Cerme. Both of school was chosen since the English teacher there using error analysis based on surface strategy to know their students’ errors made.
In selecting how many subjects will be taken as sample, the researcher uses purposive sampling technique. As knowing in all of the study, sampling is the process of selecting individuals for a study in such a way that individual represents the larger group from which they are selected. Purposive sampling technique also known as judgmental, selective or subjective sampling is a type of non-probability sampling technique. Non-probability sampling focuses on sampling technique where the units that are investigated are based on judgment of the researcher (Merriam, 2009 as cited in Purwanti, 2013).

This study uses purposive sampling technique to choose the participants who fulfilled the criteria of sample directly. In order to make a valid data, the criteria in selecting subject are used. The students who got narrative text material in their previous grade will be chosen for this study because they have a comprehension related to narrative material. The students who still got a minimum score for their writing assignment in narrative text and have willing to attend writing test from the researcher will be the subject sample of this study.

Based on the criteria above, the ninth grade students of SMPN 1 Cerme and SMPN 2 Cerme are chosen as sample for this study. The larger area of source of data will make a valid data for this study.

3.3 Data Collection

Mixed methods design involves the researcher collecting data either simultaneously or sequentially in the form of numeric information as well as text information (Cresswell, 2003:20). So, this study collected the numerical form of students’ occurrence in making errors based on surface strategy taxonomy
analysis, the researcher then gathering the information related to the causes of errors which supported by the result of interview instrument. The researcher uses multiple technique of data collection. To get the detail about students’ errors made and the causes of errors on writing narrative text, the document of writing test will be the data to be analyzed based on surface strategy. Interview is conducted as the instrument of this study to clarify the causes of errors made on it.

3.3.1 Instrument

There were two kinds of instrument in this study in order to answer the questions and achieve the purpose of this study.

a. Writing Test

Writing test is in the form of narrative text written. This type of text is used since a narrative writing was quite easy for the researcher to investigate the grammatical errors (Norrish, 1983:20). It is become easier because the researcher can decide the topic and make the subjects still focus on the topic selection. The test includes the instructions of the writing narrative text, the topic selection of the text and the length of written text.

This writing test is conducted as documents that will be analyzed based on the surface strategy taxonomy and found the errors made frequencies on it. Moreover, to answer the occurrence of errors made and the causes of it the result of document analysis need to be discussed.

b. Interview

The next instrument will be in the form of interview. This instrument is used to gather information related to the factors in making errors. It will show the
students learning as the cognitive process to find the causes of errors and difficulties exist. This interview take a role as supporting data to confirm the result of cause of errors was found by the researcher based on error analysis. There are three types of interview can be gathered by the researcher in order to get the information needed. Nunan (1992:149) divided interview instrument into three, they are unstructured interview, semi structured interview, and structured interview. The researcher tries to use semi structured interview to collect the information both from the teacher and the students. Using semi structured interview let the researcher to make some guidelines as questions to be asked for the students and teachers or even can creates and develop the questions based on the interviewees’ answer. There are five points as guideline for the researcher in interviewing the teacher. It is related to the students’ writing competence especially in narrative, the importance of grammatical for students’ writing, the way of surface strategy taxonomy in analyzing errors, the possibility cause of errors for omission, addition, misformation, and misordering, and the accuracy of cause of errors found based on analysis result toward the commonly situation. Besides that, the guidelines for interviewing the students is related to their comprehension about grammatical structure of writing narrative text, their opinion about grammatical used in writing narrative, and their difficulties faced in writing narrative text.

The interview will be given both to the English teacher and students as subjects of this study. Two English teachers will be interviewed to confirm the use of surface strategy taxonomy in finding students’ errors made and
causes of it, while the students are interviewed to clarify their difficulties in writing narrative.

The researcher only choose some of the subjects who get the highest total number of errors made in omission, addition, misformation and misordering to clarify their difficulties in writing. So, the researcher will find the answer of the third research question of this study.

3.3.2 The Procedure of Collecting Data

The data are gathered from the students of ninth grade in SMPN 1 Cerme and SMPN 2 Cerme. First, the researcher asked for permission to the headmaster of the schools to invite their students as the subject of this study. And then the researcher will go to the English teacher from both of the schools to discuss about the purpose of this study and asked for their permission to give the students writing test.

The researcher asked the students to complete their writing test of narrative text without any preparation before. The researcher gave some instructions related to the topic and the length of text. The students are allowed to open their dictionary if there are some difficulties in translating words. This spontaneous production was expected to produce the authentic data.

Then, the researcher conducts the documents and analyzes it based on surface strategy taxonomy. To classify it, the researcher put the error sentences into the table of surface strategy taxonomy analysis. To insure the data reliability, the referee is needed here. There are three people to assess and correction the error sentences on the written text. They are two English teachers and the researcher
which use the theory of surface strategy taxonomy. First of all, the researcher analyzes the data and classifies its error sentences. Afterwards, the two English teachers are asked to crosscheck the results of the identification. The English teacher served as referee if there is no agreement in classifying the error sentences.

The interview is given to the teacher in order to get the information related to the analysis using surface strategy taxonomy in students’ writing based on the interview guideline. The interview is given to the students who participate as subject of this study based on purposive sampling. It let the researcher choose subject of this study who got the high total number of errors made in their written text. It aims to find out the information about the causes of errors and the problems or difficulties during writing narrative text. The result of interview will be recorded in the form of sentences or note to be described.

3.4 Data Analysis

3.4.1 Quantitative Data Analysis

In analyzing the data, the researcher uses a table in order to help analyzing the data easily and find out the answer for statement of the problem briefly. The researcher uses surface strategy taxonomy proposed by Dulay (1982) to make an analysis on the types of errors are available with the correction of its errors. The analysis helps the researcher to identify and classify the types of errors then collects it to see the total number of errors they made. Because the researcher only focuses on the theory of surface strategy taxonomy proposed by Dulay (1982) and
causes of error, the researcher will try to focus on how sentences deviate from the correct ones.

Below is the form of analysis of students’ writing text table. It is completed with the result of type of errors found and cause of errors for each type of errors.

Table 3.1 Analysis of Students’ Writing Text

<table>
<thead>
<tr>
<th>No</th>
<th>Sentences</th>
<th>Correction</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Type of Error</td>
</tr>
</tbody>
</table>

The researcher uses following steps that are proposed by Corder’s (1981) with some appropriate modifications because the purpose of this study is to conduct the result of the whole analysis of writing text. The steps are drawn as follow:

1. Identification of errors

   After the researcher done with the form of analysis of students’ writing text table, the total number of type of errors in each student will be counted and put them into the table of errors’ identification below. To make the classification of error become easier, the researcher will use the format of the error classification as follow. So that, the form of errors classification format will be drawn as follows:
Table 3.2 Table of Errors’ Identification

<table>
<thead>
<tr>
<th>No</th>
<th>Students’ Code</th>
<th>Types of Error</th>
<th>Total of Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>OM</td>
<td>AD</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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<td></td>
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<td>...</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Note:
OM: Omission
AD: Addition
MF: Misformation
MO: Misordering

2. Quantification of errors

After the errors are classified based on the previous step, the researcher will count the frequency of errors in each category based on the frequency of them. Then, the researcher will count the percentage of errors based on the total number of errors in each category divided by the total of the whole errors. The researcher used following formula (Adapted from Mahsun, 2007:192):

\[
P = \frac{\Sigma e}{t} \times 100\%
\]

Note:
P: Percentage
e: Number of errors of each type
t: Total of errors

The result of this step will be the evidence to answer the first problem statement of this study. Counting the total number of errors in each category
based on surface strategy taxonomy will help the researcher know the frequencies of occurrence of errors in the form of percentage.

3. **Explanation of errors**

In this step, the researcher will be able to explain the kind of errors made by the students in their writing narrative text and give more detail description about it based on the previous step result. Considering to the design of this study the researcher needs to clarify the errors made occurrences completed with the description of type of errors. It aims to make the result clear and understandable.

Those steps would be the evidence to answer the first and second question of this study. In this step, the researcher will find the frequencies of errors made and the commonly errors made by the students of junior high school in writing narrative text. The researcher also generalize the finding of this study to make a briefly explanation related to error analysis based on surface strategy taxonomy.

### 3.4.2 Qualitative Data Analysis

According to Miles and Huberman (1994) there are three major components of descriptive data analysis consists of data reduction, data display and conclusion drawing. These data analysis will deliver the answer for the last problem statement of this study which aims to find the causes of errors.

**a. Data Reduction**

Data reduction refers to the process of selecting, focusing, simplifying, abstracting and transforming the data that appear in written up field notes or transcriptions (Miles and Huberman: 1994). The data reduction of this study
are the result of errors analysis based on surface strategy taxonomy and the supported data which deals as the notes of interviewing with the teacher and students. The researcher used it as the data reduction because the data are the result of findings that need to be discussed. It would be the answer of the third questions of this study which focused on the causes of errors.

b. **Data Display**

Data display can be extended piece of text or a diagram, chart or matrix that provides a new way of arranging and thinking about the more textually embedded data. In this study, the description of interviewing will use to make the clear conclusion related to the theory of the causes of errors.

In this phase, the researcher tries to interpret the result of causes of errors’ analysis in form of percentage table. Then the interviewing result will be note by filtering the information and relates it with the theory of the causes of errors. The most frequent error made become the constraints of the questions to make the interviewing still focus. The researcher interprets it in which theory the causes of errors possibly happened to the both of subject.

The explanation of reviewing from interview data became the display of the qualitative data to find the answer of third question in this study.

a. **Conclusion Drawing**

Conclusion drawing requires the researcher to decide what things mean.

This phase make the researcher will be able to conclude the result of interview then decides which cause of errors that closed to the subjects. The researcher gives more valuable conclusion related to the causes of errors in junior high school students.