CHAPTER III

METHOD OF THE STUDY

3.1. Research Approach

The writer uses experimental approach to observe the patterns used by mother of low economic status in teaching objects' name to their children. Bennet-Kastor (1988:28) stated that an experimental approach is a research that aims and expected to give information about the occurrence of caused-effect by using some manipulation of a independent variable. The independent variable in this research is the patterns that used by mother in teaching objects' name; whether they use one label for one object or multilabels for one object. Because there is a probability that the pattern which occurred are more than one, then the independent variable will be divided into three; one label for one object (X1), multilabels for one object with *bridging* X2), and multilabels for one object without *bridging* (X3). These three variables are used as independent variable. This approach is chosen because the limitation time of research restricts the writer to get naturalistic data. On the other hand, there is also the dependent variable. The dependent variable is children' understanding about the conventionality names of the object. This variable is used as dependent variable because it is assumed to be influenced by the pattern that mostly occurred in mothers' utterances in labeling objects' name.

Furthermore, this approach has some superiority better than naturalistic approach. First, the writer can control the material that will be responded by children; second, the result can be seen in short period, while in naturalistic approach the result has to be waited in weeks or even months; third, the experimental study can be applied to subjects of the same or different age (Bennet-Kastor, 1988: 31-32.)

3.2. Population and Sample

3.2.1. Population

The populations of this study are children at the age of 2-3 years old and their mothers who live in Surabaya.

3.2.2. Sample

The sample of this study is subjects as a part of the populations. The characteristics of the samples of this research are children age 2-3 years old with their mother. Those children live in Surabaya, Javanese, come from parents of low economic status, and they do not have mental and physical disorder. Mothers also live in Surabaya, Javanese, and graduated from Junior High School minimally. Because there are lots of requirements in this research, the writer uses *purposive sampling* as the sampling methodology. This method is used because the writer considers some conditions in determining the samples which are appropriate with

the goal of the study that is to investigate the patterns used by mother in teaching objects' name to their children.

On the process of collecting participants, the writer got only 15 mothers and children. In fact, there are only 12 pairs of mothers and children that are qualified as the participants in this research. In language research, few samples are allowed as long the statistical calculation considers the amount of the samples Mackey & Gass (2005: 124).

3.3 Research Measurement Instrument

The measuring instrument in this research is the instruments that are used to observe the occurrence of the patterns in labeling objects' name from mothers' utterance.

The observation is made by asking the mothers to label objects during the conversation with their children with stimulants in the form of photograph of certain objects provided by the researcher.

3.4. Construction of Research Measurement Instrument

In this research the research measurement instrument is constructed based on the theories as follow:

1. The stimulants of this research consist of objects which are sorted based on the basic category and subordinate category. This is based on the theory of Callanan (1985) and Callanan & Sabbagh (2004).

2. Parents as the closest part of children's social environment often talk about the categories of objects' name at different levels (whether from basic category, superordinate category, or subordinate category) in certain ways that can help children understand the characteristic of the categories of objects' name (Callanan, 1985: 509 in Hamida, 2009).

3. The stimulants of this research are used as a stimulant in the verbal communication between mother and child. The stimulants are divided into two categories; basic category and subordinate category. This aims to stimulate the occurrence of the patterns (one label for one object, multilabels with bridging for one object, or multilabels without bridging for one object) on mothers' utterances during the interaction between mothers and children. Mother and child are playing together, and at the same time mother teach the objects' name from the stimulants. This kind of stimulants construction is made based on the theory from Callanan (1985: 522) and Callanan & Sabbagh (2004: 748).

4. The stimulants which are chosen by the writer are objects from the category of clothing/accessory and animal. Those two categories were chosen because they were considered as objects that children are familiar with.

5. Mothers' utterances to children from their interaction will be transcribed. The transcription (*coding*) is based on Callanan and Sabbagh (2004) theory.

3.5. Technique of Data Collection

The technique of collecting the data used in this research is by observation from mothers' utterance when they were having verbal interaction with their children. On this observation, the writer asked mother to play and teach her child about the name of the object from stimulants which are given by the writer. The stimulants are divided into two categories; basic category and subordinate category which by meant to stimulate mothers' utterances. It is expected that there would be a difference of the patterns that used by mothers in labeling the object. These patterns soon will be investigated on this research. This kind of stimulants constructions is made based on the theory from Callanan (1985: 522) and Callanan & Sabbagh (2004: 748).

The stimulants which are chosen by the writer are objects from the category of clothing/accessory and animal. Those two categories were chosen because they were considered as objects that children are familiar with. To see whether the pattern of multilabels for one object will occur more than the pattern of one label for one object, the number of the objects from subordinate category are offered more than the number of the objects from basic category. This step is chosen because stated from Callanan (1985) when teaching objects from basic category, parents often put the name from subordinate category on basic category

so that this would become multilabels. The following table shows the objects that used as a stimulant.

Table 3.1. Objects used as stimulants of the research

Basic Category	**Subordinate Category**
Dress/ Accessories	*Upper dress*
Terompah	Kebaya
Celana Bermuda	Cardigan
Tas Pinggang	Beskap
	Tanktop
Animal	*Birds*
Armadillo	Burung Kardinal
Llama	Burung Perkutut
Salamander	Burung Punai
	Burung Murai

Objects on the table were created into a color photograph that printed in *glossy* paper measures 15 x 11,5 cm. The writer put the name behind some

pictures, because the children and the mothers might be unfamiliar with those pictures.

The process of verbal communication among mother and child was recorded by using video recording feature from a mobile phone NOKIA 5230. Pictures which are the stimulants are putted into a box measures 21,5 x 14,5 x 4 cm3. The stimulants are divided into 5 boxes.

After the writer got the data, mothers and children utterances will be transcribed orthographically from video recording. From the transcription, the writer will see which pattern that mostly occurs from mothers' utterances during the verbal communication with children.

3.6. Trial Test for Research Instrument

The trial test for research instrument was conducted by Hamida (2009). This test involved 30 mothers and their children. This amount of mothers and children is expected to give reliability on the research instrument especially *coder/rater* reliability can be measured and the result of score distribution will be accurate because 30 samples are qualified as a data statistic.

3.7. Inter-Rater Reliability Test

The data from the research instrument is a qualitative data obtained from rating which is characteristically subjective. To minimize subjectivity in giving the scores, rating procedure were performed by two raters (Azwar, 1997: 105).

Rater is person who gives score in rating procedure. To determine the reliability of research with this kind of data (qualitative) there must be an inter-rater reliability.

The statistic test that is used to determine inter-rater reliability is Cohen's Kappa. The estimation of Cohen's Kappa grade is about -1,0 to 1,0. The bigger grade means that the reliability is better. Kappa 0,4 – 0, 59 considered as sufficient, 0,6 – 0,7 good, and 0,8 very good (Landis & Koch, Retrieved in May 15th, 2010 from www.stattutorial.com). Cohen's Kappa was chosen in inter-rater reliability test because this is the only one kind of test that available in SPSS 15.00 software for inter-rater reliability.

Statistical test with Cohen's Kappa is applied for the data of mothers' utterances in teaching objects' name. The data from mothers' utterances is classified into three parts; one label for one object, multilabels with *bridging* for one object, and multilabels without *bridging* for one object. Then each classification that occurred during the verbal interaction between mothers and children were counted. Then the calculation result of each pattern occurrence was summarized in two ways symmetrical tables whether from *rater* 1 and *rater* 2. After this process was done, Cohen's Kappa statistical test was processed by using SPSS 15.00 software.

3.8. Technique of Data Analysis

Technique of data analysis is the technique that used to process the data from the observation. The data from the observation will be statistically analyzed using software named SPSS version 15.0. The result of the statistical analysis will show the pattern that dominantly used by mother in teaching object's name. The following are analysis of the statistic test:

1. Frequency

   Description of the patterns used by mother in teaching objects' name to their children were done by searching the frequency of the patterns' occurrence and showed in table and graphic.

2. *Wilcoxon Signed-Rank Test*

   This test aims to see whether the occurrence frequency of each pattern used by mother is different among one and another. This test is for non-parametric statistic test that investigate which variable mostly occurs. This test was being chosen when the amount of samples is less than 30 and the type of the data is nominal or categorical. The wilcoxon sign rank test is a non-parametric statistical hypothesis test for the case of two related samples or repeated measurements on a single sample (Wilcoxon, retrieved in October 13th, 2010 from http://sci2s.ugr.es/keel/pdf/algorithm/articulo/wilcoxon1945.pdf).