

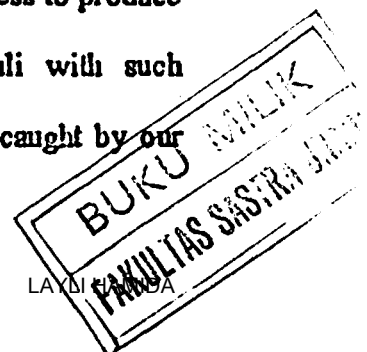
# CHAPTER I

## INTRODUCTION

### 1.1. Background of The Study

Our everyday life is never free from acts of communication. Whether it is interpersonal or intrapersonal, individual or group communication. Day by day we meet and communicate with different people with different characteristics. They position themselves in front of us with different appearance, different style of speeches, and different intention. Some people like to speak with loud voices, but there are also some who speak softly. Sometimes, we make comments upon impressions they give on us and relate them to their social or psychological background. For instance, when we meet someone who has loud voice and make only short pauses in his speech, we immediately judge that he is active and lively. Or, when the person makes so many pauses when he is speaking and we even have to ask him to repeat what he says so many times as we cannot hear him clearly, we will consider him as a reserved person, and so on. Even, remarks such as *He looks so honest*, or *He sounds very reliable*, or *You can tell she is anxious from her voice* are very common in daily life.

Actually, everything we find about a person in social interaction, whether they are messages, voices or even colors, are stimuli which directly or indirectly get into our sense. These stimuli are then shaped in our mental process to produce response. Judgements and inferences drawn from these stimuli with such comments as above are our way to give meanings to the stimuli caught by our



sense. Rakhmat (1985) says that this process of giving meanings to the sensory stimuli will later form our perception.

Concerning the nature of perception Giles and Powesland states as follows:

Our perception of other people is not a passive process. When we meet someone for the first time we immediately begin to make judgements and inferences about him on the basis of what we see and hear. The nature of these inferences and the significance which we attach to them will depend upon our conscious and unconscious assumptions and beliefs. Whether we are aware of it or not we each have our own "implicit personality theories" which enable us, with varying degree of validity, to construct impressions of people from whatever information about them is available (Giles and Powesland, 1975: 1).

Implicit personality theories are the ones that make us able to judge or draw inferences about a person. These implicit personality theories are constructed in our mental process from whatever experiences or lessons that we have been through in our environment, and because of stereotypes in our society about "what goes with what". Then, when we involve in social interaction our perception actively searches for any information or cues from a person through which we make evaluation about that person.

Speech style is one of the many indicators which provide useful cues as to what sort of person we deal with. What he or she says to us, whether it directly present dialect differences or not and whether we accept it as our primary concern or not, tells us a great deal about him or her.

Nevertheless, a greater attention for a construction of impressions upon people is usually paid not only on the basis of *what* is being said, but also on *how* it is said. On this matter, Giles and Powesland states that there is some evidence which suggests that for certain kinds of evaluation, noncontent cues have a more

significant effect than the content of speech itself (Giles & Powesland, 1975:1). Additionally, Trenholm and Jensen also proposes that the way words are spoken through the medium of voice is even considered as bringing more subtle but powerful information as it can accent, alter, amplify, modify, or even contradict verbal meanings (Trenholm & Jensen, 1975:73). In other words, the verbal behavior of a speaker does not stand alone. It is accompanied by nonverbal channel of the voice which has characteristics of its own apart from the content of the speech. These characteristics are what covered in terms of paralinguistic features which include aspects such as pitch, loudness, rhythm, voice quality, and so on.

In many social interactions where two or more people meet, communicate and make impression upon or influence each other, a greater attention is usually paid on verbal messages. But, when words only give little and even valueless information about a person, or people try to search for agreement upon verbal meanings, they will depend on nonverbal channels of communication. In this case, paralinguistic features as one of its element, occasionally serve as valuable information about a person. Crystal ( 1989 : 23 ) says that age and sex are proved to be the easiest to identify from such vocal cues as paralinguistic features. Membership in ethnic and racial groups (Giles in Scherer & Ekman, 1982) can also be drawn from such markers. Furthermore, in most cases, paralinguistic features can effectively be used to infer about the person's personality traits or states (Scherer in Scherer in Scherer & Ekman, 1982).

Several interesting inferences have been drawn to describe the relationship between paralinguistic features of speech and personality traits. Some researches use a tape-recorded speech sample. Then, subjects or judges are asked to make attribution upon the speaker based on the voice recorded. The procedure is called "matched-guise technique" in which listeners or judges are told that they are to hear the voices of different speakers. The speakers are actually the same speaker disguising his voice as to sound like different personality of speakers. In his study, Addington has found that female who speak with a "breathy" voice are judged by listeners as feminine, pretty and effervescent. Vocal "thinnes" is perceived as an indication of social, physical and mental immaturity. Orotundity is associated with heartiness and artistic inclination. A nasal voice implies a wide range of socially undesirable characteristics (Addington in Giles and Powesland, 1975:5). Breathiness, thinnes, orotundity and nasal voice are kinds of voice quality. According to Laver (1980:1) voice quality is the characteristic auditory colouring of an individual speaker's voice. Breathy voice is caused by an additional noise during the production of speech. It is characterized by the audible passage of unvocalized breath. Thin quality of voice is caused by an unusual resonance. Orotundity is marked by fullness, strength and clearness of sound. While nasal voice is caused by the lack in resonance. Beside Addington's, there are also investigations relating introversion-extraversion to speech pausing and speech rate or duration as reviewed by Siegman (1977). The studies indicate that extraverts speak faster than introverts. Another research conducted by Carleton and Ohala shows that listeners hear lower pitched voices as more confident and

dominant than higher pitched ones (Carleton and Ohala in Graddol and Swann, 1989). Additionally, Brown also found that higher pitched voices were heard as less competent (Brown in Graddol and Swann, 1989).

Many studies on the relation between paralinguistic features and personality traits or states as mentioned above have undoubtedly become evidence of the phenomena. The question is in what extent that such phenomena of paralinguistic features and personality traits display a significant relation, and how accurate is listeners' judgement about the personality traits of a speaker based on such paralinguistic features.

In this study, I attempt to focus on the relation between loudness, which is one of the aspects of paralinguistic features of speech, and extravertness-introvertness. This decision has a close connection with my interest upon stereotype that Surabaya people use to speak with louder voices and being open than any other people from different region. In fact, there are also some Surabaya people who have soft voices and are not so open to other people. Beside, Knowles' suggestion that the general loudness or "volume" of speaking is determined in part both by personality, and by ambient noise (Knowles, 1987:209), has become my consideration. Since it means that the personality of a person might be inferred from the loudness of his speech. Therefore, this study intends to learn whether loudness has significant relationship with extravertness-introvertness. The relationship is inferred from listeners' ratings upon speakers' loudness and extravertness-introvertness. In this study, the method is not created to perform a real social interaction in which there is a role change between

speaker and listener. But, at least the minimal condition of social interaction in which there is a listener's reaction toward a speaker's action is fulfilled. Based on the result of the study, I hope that a conclusion about the relation between paralinguistic features and personality traits in general can be drawn.

## **1.2. Statement of the Problem and the Hypotheses**

In relation with the background of the study, the problems and hypotheses can be stated as follows :

- 1. Does individual difference in the degree of loudness reflect his or her personality traits ( extravertness-introvertness ) ?**
- 2. How is the relation between loudness and extravertness-introvertness of a person ?**
- 3. How accurate is a listener's judgement about a speaker's extravertness-introvertness perceived from loudness ?**

**Hypotheses :**

**Ho.1 : There is no significant relationship between loudness and extravertness-introvertness.**

**H1.1 : There is a significant relationship between loudness and extravertness-introvertness.**

**Ho.2 : There is no significant relationship between speakers' scores on EPQ test for extravertness-introvertness and listeners' ratings on the speakers' extravertness-introvertness based on loudness.**

**H1.2 : There is a significant relationship between speakers' scores on EPQ test for extravertness-introvertness and listeners' ratings on the speakers' extravertness-introvertness based on loudness.**

### **1.3. Objectives of the Study**

The Objectives of this study are first, to know whether individual difference in the degree of loudness reflects his or her trait of extravertness-introvertness. Second, it intends to find out whether there is a significant relationship between loudness and extravertness-introvertness which in turn becomes evidence for the relation between paralinguistic features and personality traits in general. Finally, it is also further hoped to figure out the accuracy of listeners' ratings on speakers' extravertness-introvertness based on the loudness of their speeches by relating it to the speakers' scores on Eysenck Personality Questionnaire.

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

Theoretically, this study is expected to give contribution on the study of paralinguistic features of speech which are one of the subcomponents of an act of communication and to the study of language from social psychological perspective. Practically, to anyone who ever engage in any act of communication, the study is hoped to be an evidence of the existence of markers of personality traits in paralinguistic features of speech. Then, on a further application they can make their fellow counterpart more predictable on the basis of such markers

so they can conduct their behavior more appropriately to make the communication runs well.

## 1.5. Theoretical Framework

The attribution of a speaker's trait by a listener or a receiver from nonverbal markers in speech, in this case paralinguistic features, views language from its social psychological context. Therefore, beside theories about language, or paralinguistic features in particular, and personality traits, this study also employs social psychological theories.

Processes of impression formation or cognitive uncertainty theory proposes that when we meet others initially, we strategically attempt to make them more predictable in such away as to guide our behavior appropriately (Berger, Berger and Calabrese in Smith, Giles and Hewstone in St. Clair and Giles, 1980:288). Therefore, when we meet people even in the very first time, our implicit personality theories work out for impression from any available information about them. In this study, attempt is taken to learn how listeners' ratings on speakers' loudness go together with their ratings on extravertness-introvertness.

Concerning the function of language in social interaction, Peter Trudgill states that there are two aspects of language behavior which are very important from a social point of view. First, the function of language in establishing social relationship; and, second, the role played by language in conveying information



about the speaker (Trudgill, 1974:14). The aspect of language behavior that closely relates to this study is the second role of language.

In addition, William also notes that language attitude is considered as an internal stimulation of some type and which may mediate the organism's subsequent response (William in Fasold, 1984:147). In this case, William's theory supports Smith, Giles, and Hewstone's explanation about the role of language in social psychological context ( as explored in the general description of the object of the study ).

According to Sarah Trenholm and Arthur Jensen, words are spoken through the medium of voice, which has characteristics of its own, apart from the content of what is said. These characteristics are called vocalics, or paralinguage (Trenholm and Jensen, 1996:73). They also suggest that the voice is often used to infer personality traits (Trenholm and Jensen, 1996: 75). In this study, effort is made to proof the concepts by looking at whether there is a significant relationship between paralinguistic features of speech, especially loudness and extravertness-introvertness.

Particularly about loudness, Knowles says that the general loudness or 'volume' of speaking is determined in part both by personality, and by ambient noise (Knowles, 1987:209). In consequence, we may conclude that the personality of a person might be inferred from the loudness of his speech.

For Allport, the most outstanding trait psychologists, traits are the ultimate realities of psychological organization. He favored a biophysical conception that 'does not hold that every trait names necessarily implies a trait, but rather that

behind all confusion of terms, behind the disagreement of judges, and apart from errors and failures of empirical observation, there are none the less bona fide mental structure in each personality that accent for the consistency of its behavior (Allport in Mischel, 1971:149). As Allport proposes that the traits of a person is the cause of his or her consistent behavior, we may see that knowing about a person's trait makes us able to predict his or her behavior. Instead, the behavior of a person may also be an indication of his or her personality traits. Thus, Allport's theory goes together with Knowles's suggestion.

Some related investigations are also useful for this study. For instance, the study by Brown, Strong and Rencher (in Giles and Powesland, 1975:4) on the effect of an individual's rate of speaking upon impression formation. They used mechanically altered voices to study the separate effects of intonation and speech rate on interpersonal judgement. The investigation revealed rate to be a better predictor of personality ratings than the other cue. It was found that increasing the rate of a given speaker caused judges to mark him as less favourable on traits of benevolence (e.g. kindness, tolerance), while decreasing speech rate resulted in less favourable ratings on traits of competence (e.g. intelligence, confidence). A study by Scherer (in Scherer in Scherer and Ekman, 1982:156-7) concluded that higher fundamental frequency, which is subjectively perceived as pitch, seems to be associated with a personality syndrome of competence and dominance in male American ( and to some extent, male German speakers) as well as with a syndrome of discipline/dependability in male German and female American speakers. He also further investigated that fundamental frequency variability is

probably an important factor in expressiveness and may play a significant role in the communication of confidence and persuasiveness. Concerning loudness, Scherer found that confidence and persuasiveness may also be associated with higher intensity of speech sound, which is subjectively perceived as loudness (in Scherer in Scherer and Ekman, 1982: 155).

## 1.6. Methods of the Study

This study is attempted to gain generalization over the phenomenon of the relationship between the degree of loudness and extravertness-introvertness. To know whether the relation is significant, the study employs inferential statistics; in this case, correlation test. Hence, *a quantitative analytic method* is used.

### 1.6.1. Definition of Key Terms

- a. *Paralinguistics* is nonverbal vocal behavior that accompanies a person when he speaks with its own characteristics apart from the content of the speech.
- b. *Loudness* is variation in a person's perceived voice which can usually be ordered from soft to loud. The variation is a function of greater speaking effort caused by an increase in tension and energy in the whole of the vocal apparatus. Loudness has usually also been discussed with reference to the specific phenomena of stress which can be defined as the degree of force with which a sound or syllable is uttered.

- c. *Implicit Personality Theories* are concepts within a person's mental structure about the interrelationship between certain dispositions which enable him to construct impressions or evaluation upon people.
- d. *Personality Traits* are certain distinctive dispositions within a person which show consistency in behavior over different situation.
- e. *Trait Dimensions* are differences among individuals personality traits that shows the degree of his qualities.
- f. *Extravert* is personality trait or type of a person whose interest is prominently directed more upon social phenomena in his surrounding than upon himself and his own experiences.
- g. *Introvert* is personality trait or type of a person whose interest is prominently directed more upon himself. An introvert person prefers to hide his own thinking and feelings rather than expound it to someone else.
- h. *Social Interaction* is the condition in which two or more people construct action and reaction. In its minimal condition, there at least be an opportunity for the receiver or listener to react to the sender or speaker and it need not be face to face or under particular span of time.
- i. *Speaker* is the one who does the expression and transmits information as to be the cues for the listener.
- j. *Listener* is the person who is to construct impression upon expression and information or cues provided by the speaker.

### **1.6.2. Location and Population of the Study**

This study is conducted in Surabaya. I choose the city as the location of the study for the sake of effectiveness and cost saving because the population of the study themselves are Surabaya people.

Since this study aims to learn about a listener's impression or evaluation of a speaker's trait based on loudness and about the accuracy of such judgement, I need two kinds of population.

The first population are young adults, college students, male and female between 20 – 25 years old who are born and live in Surabaya and who come from the same social economical background of middle class family. Beside, they also have to have a well-function of articulation. From this first population, then, I draw sample of speakers. The reason of why the first population must come from the same region, the same educational and social background is to avoid differences in the style of speech which might result in differences in the way the voice is spoken through. Additionally, the age between 20 – 25 years old is considered to be the ideal age in which the voice of human is on a stable condition, meaning that it does not undergo any alteration.

The second population are Surabaya people who are born and live in Surabaya, adults, male or female between 20 – 35 years old. They have to be minimally a Senior High-School graduates and have to come from middle class of social economical background. In addition, they have to have a well-function of hearing. From this second population, then, I draw sample of listeners. The place where the population live, their age, and their social and educational background



are important because people who come from different region, different educational and social background may have different perception since they have different experiences from their environment. I may not be able to control people's perception, but I make the condition of the population in such a way as to minimally avoid bias. I determine the age of the population between 20 – 35 years old because I expect a more variation of responses since I realize that people in society is not homogenous. I need to know whether people with the same regional, social, and educational background but different ages and condition at present, that is whether they are students or employees, show an agreement in their responses toward a given stimulus.

### 1.6.3. Sampling

In order to get data for this study, I take samples because the amount of the population is too large.

The sample is taken using *purposive sampling* which involves the process of seeking out people based on some criteria. Thus, for the purpose of this study, two kinds of sample have to be taken, that are, sample of speakers and sample of listeners.

#### 1.6.3.1. Sample of Speakers

For the sample of speakers, I take twenty people from the first population which consists of ten male and ten female who suits the criteria mentioned in the first population of the study. The twenty people are then selected using Eysenck

Personality Questionnaire on extravertness-introvertness to get six people male and female who have the extreme extravert score ( having the highest score on the questionnaire ), have the extreme introvert score ( having the lowest score on the questionnaire ), and have average score on the questionnaire. Then the six people are the actual sample of speakers of this study.

### **1.6.3.2. Sample of Listeners**

By means of purposive sampling, I take thirty respondents to be the sample of listeners. In this case, the respondents must suit the criteria of the second population of the study.

### **1.6.4. Instruments of the Study**

For the explanation of the instruments of the study, I need to divide it into two stages.

In the first stage, the instruments of this study are persons who have different speech characteristics, in this case, different degree of loudness, and different personality traits. These persons are to be the speakers and to be observed by the listeners.

To select the persons as the instrument of this study, first, I choose twenty Surabaya people. Then, I distribute Eysenck Personality Questionnaire (EPQ) on extravertness-introvertness to them to get the measure of their extravert-introvert trait. The procedure for EPQ test scoring is: every extravert item which gets "yes" answer or introvert item which is answered "no" is given one value. Every

introvert item which gets "yes" answer or extravert item which gets "no" answer is given zero value. There are twenty items in the questionnaire and the items for extravert are items number: 1,2,4,5,8,9,14,16,17,19, and 20. While, the items for introvert are items number: 3,6,7,10,11,12,13,15, and 18. The mean value of the the scores has to be found to determine the persons' extravertness-introvertness. The mean value is gained by dividing the total scores with the number of subjects. If the score of an individual person is higher than the mean, he or she is considered as extravert. If the score is lower than the mean, the person is considered as introvert. Second, I do an observation on the sample of speakers to know which one has soft or loud voice.

After the scoring and the observation, I choose six from twenty people which consists of two male and female who have the lowest scores on the questionnaire and have soft voices, two male and female who have the highest scores and have loud voices, and two male and female whose scores are around the mean and who have medial loudness of voices.

Next, I record the voices of those six persons. In the recording process, the speakers are reading the same passage of "neutral" verbal material. Neutral here means that the content of the speech does not concern with any topic that may lead to the assessment of the trait. Furthermore, during the recording there are procedures that have to be taken seriously in order to get a good recording, for example, the distance between speakers and the microphone of the tape recorder, the head direction of the speakers and the standard gain setting of the tape recorder. The voices, then, become the instrument of the study. Whether the



loudness of the six person's speeches is on the same line with their degree of extravertness-introvertness quality can be explained from the results of listeners' responses.

In the second stage, I need to know the accuracy of listeners' judgement on speakers' extravertness-introvertness based on loudness. In this case, the accuracy is gained by investigating the relationship between extravertness-introvertness ratings perceived from speakers' loudness and their scores on Eysenck Personality Questionnaire. Therefore, in this second stage, the speakers are the object of the study, while the listeners are the instruments for assessing the speakers' extravertness-introvertness from loudness.

#### 1.6.5. Techniques of Data Collection

In collecting the data I use instruments which are the results of the procedure that have been explained in the previous section. First, I look for respondents who fill the requirement of both the first and the second population of this study. Second, I do the procedure as explained in the first stage of getting the instrument of the study, that is, to get six sample of speakers. Third, I ask the listeners to listen to the recorded voices of the speakers chosen. The recorded voices are played twice. Then, the listeners are asked to rate the speakers' loudness. Since loudness is aspect of sound which is subjectively perceived by our auditory sensation, and therefore is difficult to be measured, I ask the listeners to rate the loudness on a semantic differential scale to make it describable. On this kind of scale there are ten lines each of which has value from one to ten. Value

ten is the highest value which represents the loudest voice, and value one is the lowest value which represents the softest voice. The listeners are asked to give a mark on the line closest to their perception about the speakers' voices. Based on the loudness of the speakers' voices, the listeners are asked to rate the speakers' extravertness-introvertness also on a semantic differential scale. They are asked to ignore the content of the speech and notice to the loudness of the voice alone, then rate the speakers' traits based on the loudness. On this scale, the tenth line represents the highest degree of extravert quality and the first line represents the lowest degree of extravertness or the nearest degree to introvert quality. In this case, a note for listeners concerning what is meant by extravertness-introvertness should be provided as to avoid fault perception.

In short, the techniques for collecting the data are:

1. Finding respondents.
2. Doing the procedure to get six sample of speakers.
3. Finding respondent of listener.
4. Asking the listeners to listen to the recorded voices.
5. Asking the listeners to rate the speakers' loudness.
6. Asking the listeners to rate the speakers' trait.

### **1.6.6. Techniques of Data Analysis**

In analyzing the data, first I need to calculate the semantic differential scales on loudness and extravertness-introvertness. The calculation is done by finding the mean value of the ratings for each speakers. Secondly, I test the results

of the scales' calculation using correlation test, in this case the Pearson Product Moment Correlation test, to know whether loudness and extravertness-introvertness show significant relation. Third, I do a second correlation test to know the relationship between extravertness-introvertness ratings perceived from speakers' loudness and their scores on Eysenck Personality Questionnaire. The data for speakers' extravertness-introvertness perceived from loudness are all at once obtained when I ask the listeners to rate the speakers' trait based on their loudness, as explained in the fifth step of the techniques of data collection. Finally, from the results of the correlation test and the data obtained, I do the interpretation of the results.

In short, the techniques for analyzing the data are :

1. Calculating the semantic scales.
2. Doing the correlation test on speakers' loudness and extravertness-introvertness.
3. Doing the correlation test for speakers' extravertness-introvertness perceived from loudness and from EPQ test.
4. Interpreting the data.

## **CHAPTER II**

# **GENERAL DESCRIPTION OF THE OBJECT OF THE STUDY**