

CHAPTER II

LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Mother's speech characteristics

Adult speech addressed to another adult is different from that addressed to children. The language used by the adult to communicate to children is simpler and easier to understand for the children. Then, the extent to which this special register simplifies the input to the child (Hyams, 2008). Fernald (1989) also claimed that beside the simplification of the mothers to their children, there are also some characteristics of mother's speech such as less complex grammatically, more redundant, and with a higher pitch and exaggerated intonation pattern. The intonation patterns of adult speech to infants differ dramatically from those normal adult conversations (Fernald, 1989).

To normal child, mothers usually use the characteristics that have been mentioned before in their utterances. However, the characteristics will be different to the hearing-impaired ones. The linguistic skill of the audience also influences mothers' speech (Bergeson, Miller, & McCune, 2006). Mothers' of hearing-impaired children tend to use certain ways to communicate with their children such as sign language, lip reading, and hearing (as possible as they can). Sometimes, the parents who have hearing impaired child use less complex verbal language. Finally, NH mothers tend to produce fewer and less complex verbal utterances but more

hearing-impaired infants and children compared to interactions with NH (normal hearing) infants and children (Bergeson, Miller, & McCune, 2006).

Mothers' of hearing impaired children speech characteristics are different compared to the normal ones. They use shorter speech, high intonation, fewer words, slower speaking rate and longer pauses. The utterances were shorter in duration but interutterance pauses were longer in duration in ID speech than AD speech, regardless of infant hearing status (Bergeson, Miller, & McCune, 2006). Nevertheless, they usually produced longer pauses to older infants than the younger ones. Perhaps mothers of younger NH infants and CI infants with less hearing experience than the H-AM infants pause for a shorter period of time between utterances because they do not expect the infant to respond to them (Bergeson, Miller, & McCune, 2006).

2.1.2 Intonation

According to Wells (2006) intonation is the melody of speech. In studying intonation we study how the pitch of the voice rises and falls, and how speakers use this pitch variation to convey linguistic and pragmatic meaning (Wells, 2006). Roach (1998) also stated that no definition is completely satisfactory, but any attempt at a definition must recognize that the pitch of the voice plays the most important part. It would be hard to say in one or two sentences what intonation is and how it works (Gussenhoven, 2004). The speech is monotonous and has no meaning if we had no intonation and no one pitch throughout. According to Gussenhoven (2004) an intonation contour has two structures: a morphological

one, which identifies the morphemes and thus gives the meaning of the contour; and a phonological one, which gives its tones.

Intonation is a part of the suprasegmental of phonology, and its mostly neglected. Every word has different meaning if the speakers said in different intonation. The intonation system of English constitutes the most important and complex part of English prosody. By combining different pitch levels (= unchanging pitch heights) and contours (- sequences of levels, changing of pitch shapes) we express a range of intonational meanings: breaking the utterances into chunks, perhaps distinguishing between clause types (such as statement vs. question), focusing on some parts of the utterance and not on others, indicating which part of our message is background information and which is foreground, signaling our attitude to what we are saying (Wells, 2006). Some language uses different stresses to convey the meaning of the word. Many languages express focus in the prosodic phonology, and often the phonology and morphology appear to have arranged matters such that the focused part is more salient, and is characterized by greater pitch excursions (Gussenhoven, 2004).

Prosodic characteristics of speech are pitch, loudness and speed (or tempo, or speech rate; its inverse is the duration of the constituent segments). Then, the combination of those characteristics make up the rhythm of speech and also combine with stretches of silence to break up the flow speech. There are some prosodic characteristics similarities between one and other language. It happens naturally when the speakers in certain condition when they uttering something. They will speed up when they are excited or slow down when they are being

thoughtful or weighty. However, every language has its own prosodic characteristics. Simply transferring the prosodic patterns of one's mother tongue or L1 to a foreign, and may quite possibly lead to your being misunderstood by other speakers (Wells, 2006). The tone is another prosodic characteristic, being realized mainly by differences in the pitch of the voice (e.g. High level, mid level, low level, rising or falling). Some languages use tone lexically. A word could have a different meaning if it is said in a different tone.

As concerns intonation, English speakers repeatedly face three types of decision as they speak, like the accent, how to break up the material into chunks, and what tones are to be used. And there are three linguistic intonational systems known respectively as tonality, tonicity, and tone (also known as the three Ts). Tonality, in dealing with intonation brings the speaker to chunk the spoken material into several parts. Chunks in here are known as intonation phrases or IPs. Each IP has its own tune or intonational pattern, then the clause will be separated into an IP. The symbols | and || represent the boundaries between IPs.

*If my son comes home | you may leave the house. || When
he is already inside, tell him you'll leave.*

There is no special role to identify the IP for each clause. There are many cases where the different kinds of chunking are possible.

The speakers also use the intonation to highlight some important information in their utterances. It is used to convey the meaning of the utterances and to get the hearers' attention. To highlight this information the speakers need to accent the word and stressed the syllable. Those are included in tonality, the

second linguistic intonational system. To show the highlight information we accent it, or more precisely we accent the stress. The last linguistic intonational system is tone. Tone is the kind of pitch movement that the speaker says. There are three types of tones in her, there are fall, rise, and fall-rise. In general, fall tends to indicate that the information is complete, while rise or fall-rise tends to indicate that there is something more to come. A fall-rise often signal particular implications (Wells, 2006).

Not only the intonational system, Wells (2006) also mentioned that intonation has 6 functions to signal the meaning of the language.

- The attitudinal function is the most obvious role of intonation to express the speakers attitude and emotions (sadness, surprise, interest, happiness, anger , and others).
- The grammatical function. In this part, intonation helps identify the grammatical structures in speech. Intonation is used to distinguish clause types, such as question-statement, and ambiguous structures.
- The focusing function. Intonation helps to show what information in an utterances is new and what is already known.
- The discourse function. Intonation signal how sequences of clauses and sentences go together in spoken discourse, to contrast or to cohere.
- The psychological function. Intonation helps us to organize speech into units that are easy to preserve, memorize and perform.
- The indexical function. Just as with other pronunciation features, intonation may act as a marker of personal identity.

2.1.3 Characteristics of Intonation in Bahasa Indonesia

Halim (1984) stated that intonation is phonological interpretation of the components of syntax which have two images, segmental and nonsegmental (prosody) images. And these two images cannot stand alone, so they work simultaneously. In Bahasa Indonesia, intonation also takes the main part to convey the meaning of the each word uttered. According to Halim (1984) intonation tendency has close relation with sentence structure (syntactically and noun phrase) and interrelation in a discourse. The sentences below are the example of the difference between English (a) and Bahasa Indonesia (b) (Halim, 1984):

(a) *'Ini adalah [kucing yang menangkap [tikus yang mencuri [keju itu]]]'*

(b) *'Ini adalah kucing / yang menangkap tikus / yang mencuri keju itu'*

Halim also claimed that intonation and sentence correlation should have observed due to explain the sentence structure as far as the ability of the speaker-listener. Characterization of Bahasa Indonesia has 4 units of distinctive intonation such as intonation pattern (total), the group pauses, contour (pro-contour, main contour, and prime contour), and intonation phoneme. What is meant by contour is the configuration unit consisting of pattern of pitch, pitch motion, and stress.

Intonation pattern in Bahasa Indonesia consists of a group of pause or more, and a group of pause consists of whether a prime contour or the combination of pra-contour and main contour. Those contours are started with pitch level, but only main contour which has stress. Prime and pra-contour are

started with high pitch level. The meaning of the contour itself is a configuration unit which consist of a high pitch term, high pitch movement, and stresses.

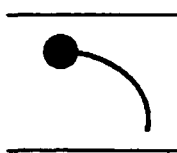
2.1.4 The Types of Intonation Pattern

There are three basic nuclear tones in intonation pattern: falls, rises, and fall-rise. Each tone has its own meaning even in a single word utterance. A popular idea among language students is that statements are said with fall, questions with a rise (Wells, 2006). In English, statements and questions could have a fall or rise tone. Wells (2006) stated that there is no simple predictable relationship between sentence type and tone choice, and it is useful to apply the notion of neutral tone. The types of tone will be explained further in the next sub chapter.

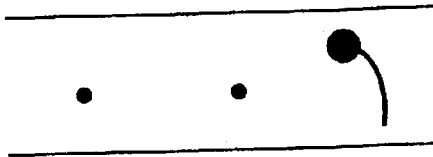
2.1.4.1 Falls

The pitch of the voice in a falling tone starts from mid, high, or even level, but the endpoint is low. There may be some upward movement before the pitch moves downwards (Wells, 2006). In the simplest cases the fall takes place on a single syllable. Roach (1998) gives an example of one-word utterance 'yes' and 'no'. In one-word utterance we can easily see the fall happen on that last syllable in the IP.

- \Yes!



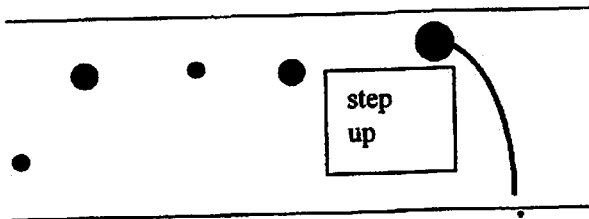
- It was \great!



From the example above we know the movement of the possible pitch are found in the intonation phrase. All of pitch levels are possible in the falling type, as long as the endpoints are going low.

The examples below will show that step up in pitch is very often happen in the beginning of nuclear fall. And also often there are syllables after the nucleus, like tail. But after the falling nucleus, the tail is always low.

- I 'really don't \care!



- \Lovely!



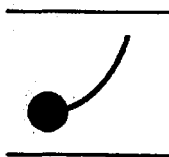
There are some categories that can define why some sentences have fall intonation:

- **Statements:** although simple independent statement can have any intonation, they most often have a fall. A fall is the default tone for statement.
- **Wh questions:** the default tone for wh question is a fall.
- **Exclamations:** is the expression of angry, surprise, or excitement. We call this category as exclamatory fall.
- **Tag questions:** even this kind of category have rise intonation, but it has the other possibility to have a fall. With a falling tag, the speaker insist, assume or expects the the other person will agree.
- **Commands:** the default tone of command is fall
- **Checking:** most of checking's intonation is rise. But for a clarification, it has an ordinary wh question, means that the intonation is fall.

2.1.4.2 Rises

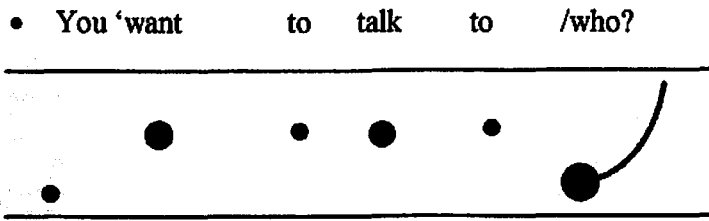
Different with the fall one, in a rising nuclear tone, the pitch of the voice relatively starts low and then move upwards.

- /Who?



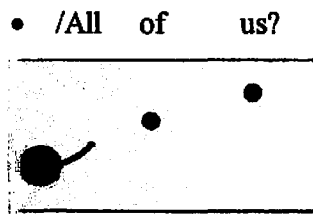
Again, in identifying the nuclear tone we must disregard any prenuclear pitch pattern (Wells, 2006).





There is often a step down in pitch as we reach the beginning of the nuclear rise, and don't consider it as falling tone.

But if there is a tail, the rising pitch movement doesn't happen in all nuclear syllable just like in the falling tone ones.



There are also some categories that can define rise intonation:

- **Wh question:** a wh question can be said as non-fall. The effect of this intonation is to show the sentence more gently, kindly, encouraging, sympathetic or differential. It also called encouraging rise.
- **Yes-no question:** the default tone of yes-no question is rise.
- **Tag questions:** are short yes-no questions tagged onto the end of a statement or a command. The intonation of this category is called yes-no rise.
- **Declarative questions:** they are usually said by rise intonation.
- **Checking:** there are some types of checking that have rise intonation such as pardon question, echo question, second-order question, and pelase-

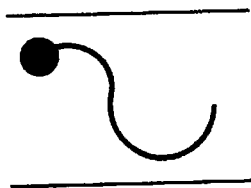
repeat wh question. checking means that the speaker wants to hear another speaker's answer once more.

- Independent rise: this kind of category is used for short responses encouraging further conversation.
- Commands: command also can be said in rise. we use this when speaking to the children, but when we said it to an adult, it sound patronizing.

2.1.4.3 Fall-rises

In the fall-rise nuclear tone, the pitch of the voice starts relatively high and move downwards first and then move upwards again. Same like fall and rise tone, the starting point may be from anywhere, but at the endpoint is usually mid.

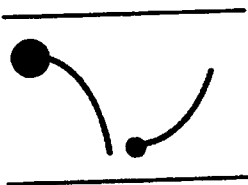
- ∇ Mine.



If there is any tail, the falling-rises pitch movement is spread out the nucleus and tail. The falling part takes place between that syllable and

the next, while the rising part takes place towards the end of the tail.

- ∇ Almost.



Fall-rise intonation has some category that can define the its intonation:

- The implication fall rise: sometimes, statements are said with an intonation other than fall. some of them have rise or fall-rise intonation.

- **More about the implication of fall-rise: fall-rise can also be used to signal that the speaker is tentative, explains polite corrections, make partial statement, used for negative statement.**
- **Declarative question: beside rise, declarative questions, sometimes, are said with a fall-rise.**
- **Leading and trailing tones: the leading of the sentences usually using fall-rise intonation, or we call it with dependent fall-rise.**
- **Open and closed lists: the opens of this category usually have non-fall intonation (fall-rise or rise), and closed fall (definitive fall).**

2.1.6 Review of Related Studies

There are very rare studies which is discussed about the intonation of the mothers to their hearing impaired children. There are some studies which is talked about the the speech of the mother, instead of the intonation. Intonation research more focuses that the speech, so the writer intended to conduct the research about the intonation of the mother's utterances to her hearing impaired child.

In Lim and Simser's (2005) research showed the mothers' participation in developing their hearing impaired child's language ability. They use Audio-Verbal Therapy to treat the hearing impaired child. The uniqueness of this method is the children are pushed to hear the voice as well. They cannot hear, depend on the damage level, or only hear dim sounds but they have to listen to communicate with the people surrounding. Then, will or not, the caregivers have to provide

extra 'loud' voice to treat the children in order to develop their language skill. The Audio-Verbal Therapy's principle is trying to postulate that 'total deafness' didn't exist (Lim & Simser, 2005). According to them, deafness can be trained to hear words.

This method has to involve the mothers to participate in developing the language of the children. The mothers are trained how to treat the children everyday in their daily activities. The therapist taught the mother how to produce certain voice in order to make the children could hear the voices. And there are also involved the expression to support the voices that the mothers utter to convey the meaning to the children. Not only the mother, but also the entire family should take part to treat the children. The goal of this method is based on developmental stage and hearing age of the child and incorporated into structured activities, in meaningful daily routines, and most importantly, into playtime.

While in Bergeson, Miller, and McCune's (2006) research shows that the communication between the mothers to their hearing impaired children. Their participants were 9 hearing impaired and have a cochlear implant infants (10 – 37 months), eighteen normal hearing (NH) infants (10 – 37 months), and hearing experience (3–18 months) to the CI children. They emphasized the communication program, and it was divided into two: oral communication (OT) and total communication (TC). They used the MacArthur Communicative Developmental Inventories (CDI) to determine the number of words produced by the CI infants and children within 3 months of the time of the test. The purpose of

this study was to investigate the effects of hearing loss and subsequent cochlear implantation on mothers' speech to infants and children.

The result showed that there was no significant difference in the size of the F0 change between ID and AD speech when comparing the speech to CI and hearing experience infants. Thus, the pitch was generally higher in mothers' speech to infants than to an adult experimenter, regardless of their infant's hearing status. Most of the mothers produced similar increases in pitch when talking to CI infants and NH infants. Minimum and maximum pitch were generally higher in mothers' speech to infants than to an adult experimenter. But the pauses between the two 'types' of mother showed significantly different. Two-tailed t tests revealed a marginally significant difference in the size of the change in pause duration between ID and AD speech when comparing CI versus H-AM infants, and a statistically significant difference in the size of the change in pause duration between ID and AD speech when comparing H-EM versus H-AM infants (Bergeson, Miller, & McCune, 2006).

The differentials of those mothers in utterances were shorter in duration but interutterance pauses were longer in duration in ID speech than AD speech, regardless of infant hearing status. Finally, mothers produced a number of utterances in the 2-min sample but produced fewer words in utterances when talking to infants than to adults. The results of their analysis showed that mothers increased their average pitch level more when talking to younger NH infants (3–18 months of age) than to older NH infants (10–37 months of age), as compared to AD speech. The increase in average and minimum pitch from AD to ID speech

in mothers' speech to CI infants approximated the pitch increases in speech to H-EM infants more closely than the H-AM infants.

CHAPTER III

METHOD OF THE STUDY