CHAPTER 1

INTRODUCTION

1.1 Background

Most societies have a register which is used to address very young children; such register is often regarded as simplified register (Ferguson, 1977) and commonly referred to as Infant Directed Speech (IDS) or Motherese. Much research work on child language and on language acquisition in the past has focused on the developmental aspect of a formal linguistic system of the child. It studied the phonological, grammatical, and semantic development, the development of child language has been claimed as the child's attempt to accomplish the formal linguistic system of the adult. However, since 1970 a good deal of work has been devoted to investigation of the relationship between language acquisition and the kind of speech addressed to young children especially after the work of Chomsky (1959, 1965) on Language Acquisition Device (LAD) hypothesis.

Snow (1977) has proposed three basic assumptions about language acquisition and these three assumptions have been well accepted among scholars doing research in mothers' speech. First of all, it is claimed that language acquisition is the result of the process of interaction between mother and child which begins early in infancy, to which the child makes as important contribution as the mother, and which is crucial to cognitive and emotional development as well as language acquisition of the child. It is also claimed that language acquisition is guided by and is the result of cognitive development. And finally, it is claimed that in language acquisition the child also acquired communicative skills, and this acquisition is as interesting as the acquisition of syntax and phonology.

All of these claims refute Chomsky's Rationalist or Innatist theory which claims that language acquisition is largely innate and occurred almost independently of the language environment. The three claims aforementioned argue that the language of adult directed to infant plays a major role in the child's language development not only in terms of language acquisition but also in terms of the acquisition of communicative skills. As we will notice that this type of language input has its own characteristics which is very different from the adult speech claimed by the Rationalist to be the input to the children language acquisition device. IDS helps to support the Functionalist's view that language acquisition is a social process as well as a communicative process, and the process depends on the interaction between the child and its language environment.

It is often claimed that we speak to children differently from the way we speak to adult. For instance, speech directed to infants is more fluent and consists of fewer errors than speech directed to adults (Adult Directed Speech-ADS). Since young children have not acquired the structures and functions of language, adults tend to modify their speech to accommodate the communication with children. IDS has certain phonetic characteristics, a more simplified syntactic structure and a more restricted vocabulary (Snow and Ferguson, 1977). Cruttenden (1994) summarizes that a good deal of past research has been devoted to investigating phonetic aspects of IDS such as consonant substitutions, consonant simplification, consonant harmony, simpler consonant-vowel type of syllable structure, and phonetic amplification of particular type of segments. In case of prosodic aspects, IDS uses higher mean pitch and wider pitch range (Garnica, 1977; Fernald, Taeschner, Dunn, Papousek, De Boysson-Bardies, and Fukui, 1989), more use of rising intonations (Stern, Spieker, and MacKain, 1982) more junctural pauses (Broen, 1972) , longer pauses (Fernald and Simon, 1984), and lengthening of final syllables (Bernstein Ratner, 1986).

Vast evidence suggests that IDS constitutes a universal mother behavior as the above characteristics. A good deal of work has been done on phonetic and prosodic aspects of IDS, but little is known about the communicative speech acts. Investigating in this area of IDS will aid the formulation of a hypothesis dealing with the acquisition of communicative competence. From my pilot study (Authapaiboon, 1996), the analysis of IDS in terms of speech acts using speech acts theory proposed by Searle (1969) has revealed that the speech acts of IDS at two different ages of children, at birth and at 3 months were quite distinct from those of ADS. In the study, the speech acts were classified into two major classes-non-interactive class, and interactive class. Non-interactive class of speech acts were non-interactive assertive (inform, describe, explain, count, sing, exclaim). Interactive class of speech acts were interactive assertive (tease, comfort, persuade, call, blame, warn, complain, calm, praise, greet, respond), interactive question (question), and interactive command (command). It was found that utterances in IDS belong to the interactive class of speech acts more than ADS. It was claimed that this class of speech acts may have been used to reinforce the communicative interaction between mothers and their children.

Since there has never been any study of IDS examining IDS in developmental terms, a longitudinal study rather than a cross-sectional one is needed to investigate the development of IDS. This study will examine the phonetic characteristics and the pragmatic characteristics of IDS claimed to be varied by the age of the child. IDS will also be compared to ADS in their phonetic aspect.

1.2 Aims of the Study

Purpose

The purpose of the present study is to investigate the phonetic and pragmatic characteristics of IDS (newborn IDS (NB IDS), three months-old IDS (3MO IDS), six months-old IDS (6MO IDS), nine months-old IDS (9MO IDS), twelve months-old (12MO IDS)) and compare them with those of ADS.

More specifically the purposes are:

1. To investigate the phonetic and pragmatic characteristics or the speech acts directed to the newborn, the three months-old, the six months-old, the nine months-old, and the twelve months-old.
2. To describe IDS in developmental terms.
3. To analyze the phonetic characteristics of ADS
4. To compare the phonetic characteristics of IDS and ADS

Hypothesis

1. IDS varies by age in both the phonetic and pragmatic or speech acts aspects.
2. IDS and ADS differ in phonetic characteristics- higher mean fundamental frequency, shorter duration per utterance, longer duration per syllable, less number of syllables per utterance, and lower intensity of IDS as related to ADS.

Scope

To study the phonetic characteristics, specifically the prosodic aspects- pitch, tempo, and loudness, and the pragmatic characteristics, i.e., the speech acts of IDS in six mothers. Half of mothers are mothers of male infant and half of them female infants.

Contributions

1. To further our knowledge of language acquisition theories.
2. To provide knowledge about the interaction between mother and child in developmental terms (from newborn to one year-old)
3. To propose a new approach in studying IDS.

1.3 Glossary of notations and terms

Infant Directed Speech (IDS). The speech addressed to infants and young children. Some other terms can be used too such as 'Motherese', 'Parentese', 'Input Language', 'Caretaker Speech', 'Child Directed Speech', and 'Baby Talk'. The term 'Baby Talk' may be interpreted as referring either to the speech of children or the style of speech used by adults to talk to children. However, the latter meaning is used here.

Adult Directed Speech (ADS). The speech addressed to adults.

Pitch. The auditory property of a sound which enables a listener to place the sound on a scale from low to high. (Ladefoged, 1962: 112)

Fundamental frequency (Fø). The acoustic property of the pitch of a sound. Fø correlates with the rate of opening and closing of the vocal cords, e.g. in articulatory terms we say that the sound is produced while the vocal cords vibrate at the rate of a hundred and fifty cycles per second, and in acoustic terms we say that the sound has a fundamental frequency of 150 cps. or 150 Hertz (Hz). For a male voice the average of the fundamental frequency may be between 80-200 Hz. A woman's voice may go up to about 400 Hz. (Ladefoged, 1975).

Semitones. The semitone scale converts absolute frequency into a ratio value because the perception of a change in pitch at different frequencies has been shown to be more closely related to proportional changes rather than to absolute changes in frequency (Grieser & Kuhl, 1988).

Loudness. The auditory property of a sound which enables a listener to place the sound on a scale from soft to loud (Ladefoged, 1962: 112).

Intensity. The acoustic property of the loudness of the sound which is proportional to the average size, or amplitude of the variations in air pressure (Ladefoged, 1975: 163).

Decibel (dB). A measurement for the power of a sound. It is proportional to the amplitude which is the decrease or increase of air pressure at a given point during a sound. It is indirectly associated with the loudness of the sound (Ladefoged, 1962: 109-112).

Duration. A term used to refer to the length of time involved in the articulation of syllable. Distinction between relatively 'long' and relatively 'short' durations are measured in units of time, second (sec.) (Crystal, 1985: 103)

Linguistic Action Verb (LAV). The term covers all verbs which can be used for the description (and sometimes the performance) of types or aspects of linguistic action or verbal behavior (Verschueren, 1994: 4138).

Speech Act Verb (SAV). The verbs which can be used for the description (and sometimes the performance) of 'speech acts' in the sense of orthodox speech act theory as formulated by John Searle. In other words, SAV typically focus on an 'illocutionary force' associated with a single utterance of sentence length (Verschueren, 1994: 4138).

Utterance. A unit of speech that forms a unified whole in meaning. It could be defined as a unit of speech using auditory pauses as a marker to delimit the utterance (Luksaneeyanawin, 1994).

Speech Act. An utterance as a functional unit in communication indicates the speaker's intention (Searle, 1969).