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Baby Talk: A Critical Analysis

Peyman Rajabi, (Ph.D.)[1], Shiva Marzoughi[2]

[1]ELT Department, Malayer Branch, Islamic Azad University, Malayer, Iran
[2] Ph.D. Student in TEFL, Malayer Branch, Islamic Azad University, Malayer, Iran

[1]**Paymanrajabi2002@yahoo.com**
[2]**Marzoughi.shiva@ yahoo.com**

Abstract: In all speech communities there are probably special ways of talking to young children who differ more or less systematically from the more normal form of the language used in ordinary conversation among adults. Baby talk refers specifically to a speech register, optionally used by caregivers to infants and young children, and is marked by slow rate, exaggerated intonation, high fundamental frequency, many repetitions, simple syntax, and a simple, concrete vocabulary. Conversations with babies serve to introduce new words in many conceptual domains. The here-and-now nature of many conversations with young children helps guarantee joint attention along with physical and linguistic co-presence. It also helps adults interpret what young children are likely to be saying. This allows children to make maximum use of contextual cues in assigning an interpretation of unfamiliar words and constructions. The fact that some form of baby talk is universal in all cultures strongly suggest that it can influence language acquisition, or may in fact, facilitate it. The current study takes a critical stance towards this issue in language acquisition.

*Key words***:** baby talk, direct speech, infant language

1. Introduction

In many cultures, adults apply a modified form of speech in different styles when talking to infants and young children. We usually call this shift of tone, syntax and attitudes as "baby talk". Assuming an important role for the nature of input, for decades, baby talk has been the subject of different lines of research within linguistics, psychology, speech language pathology, and anthropology. As a consequence, the scope of terminology in the area varies considerably (Ingram 1989). Most recent studies have demonstrated that from birth, all infants show a preference to listen to their parents' speech. (Cooper, Abraham, Berman, & Staska 1997; Longo, Reschke, & Barber, 2002; Singh, Morgan, & Best, 2002). This modified form of speech is usually more effective in comparison to regular speech in getting and holding an infant's attention. The words are pronounced slower, more repetitive, and more likely to exaggeration especially on vowels. Also, in using baby talk, parents are more likely speak in simpler and shorter utterances. Experiments suggest that these modifications help babies develop several key abilities and have instructional benefits. Most researchers have contended that baby talk is a crucial part of the emotional bonding process between the parents and their child in helping the infants learn the

language.

The central focus of the present paper is on main characteristics of baby talk and its contribution on the infants' linguistic and cognitive development. The paper also intends to extend understanding on the universality of this kind of modified speech. Recent research has shown that adult input is far more important than some theories earlier believe. More significantly, as asserted by social interactions, the patterns of interaction between parents and children change according to the increasing language skills of the children. It is perhaps this factor that provides evidence to the significance of the nurture and the environment in child language acquisition.

2. Review of the Related Literature

Baby talk refers to caretaker speech, infant directed speech (IDS), child directed speech (CDS), parentese, or motherese, is the speech which infants and children hear. In this paper, we use 'baby talk', an older term in the literature, to refer specifically to a speech register, optionally applied by parents to infants and young children, which resembles the form of immature child speech within a culture. However, anecdotal reports and casual observation show that baby talks used with other target categories, e.g. inanimate objects, animals and adults. In such cases it is called 'secondary' or 'displaced' baby talk (Ferguson, 1977). In addition, using among adults, it affords multiple communicative and interpretive possibilities, from the depreciatory connotation of baby-like status to a reassuring message of affection and nurturance.

2.1 Characteristics of Baby Talk

The research on baby talk to children has found features that are characteristic of it. Kaye (1980) divides these features into five general categories, summarized below.

Table 1

Five Kinds of Characteristics of English Baby Talk (adopted from Kaye, 1980)

Characteristics	Specific examples and references
1. prosodic features	higher pitch, greater range of frequencies, more-varied intonation (Garnica, 1977; Sachs, 1977)
2. lexical features	special forms like *potty* and nana (Ferguson 1964) shorter utterances, fewer embedded clauses, fewer verb
3. complexity features	auxiliaries, etc. (Snow 1977a; Furrow, Nelson & Benedict 1979) more immediate repetition and more repetition of the same words
4. redundancy features	or phrases over a period of time (Snow 1977a)
5. content features	restriction to topics in the child's world (Snow 1977b)

Detailed explanations are presented below about each item:

2.1.1 Vocabulary

Language regardless, "baby talk", usually consists of a group of words the children commonly face every day, including names for family members, animals, playing, eating and meals, bodily functions and genitals, sleeping, crying and pain. It also includes important daily objects such as diaper, doll, blanket, pacifier, bottle, etc., and may be sprinkled with nonverbal utterances, such as 'bum bum'. Research has shown that caregivers often look to the word choice and pronunciation of their child as a guide in deciding what vocabulary to use, showing a tendency toward child- driven phrases (Singleton, 2014).

2.1.2 Repetition

The base structure of the baby's words is a form of which is often repeated. i.e. 'bow wow' (dog). In addition, it may contain a closed syllable unit which is often repeated (reduplicated) i.e. 'nam nam'. Some other words maybe made when a stressed syllable of the main word is taken by the child to shorten it and repeats it to form a word-like utterance 'ba-ba' from bottle 'dum-dum' from dummy (British term for a pacifier) 'mama' from mother 'dada' from daddy.

In baby talk, many words, particularly names for animals are repetitive and onomatopoeic in nature making them easy for little ones to say and remember for example, 'momo' for 'cow' (Singleton, 2014). 'Choo-choo' the sound made by a train is an instance of outside the animal world.

2.1.3 Diminutives

One of the most surprising aspects of baby talk is the way diminutives are used. These words are usually made from a diminutive followed by an /i/ sound at the end, usually written and spelled as /ie/, /y/, or /ey/, 'horsey' from horse   'kitty' from cat or kitten. In English, diminutive forms are used when addressing small children ; usually don't vary greately from their grown up counterparts with 'dogs' and 'ducks' becoming ' doggies' and ' duckies' (Singleton, 2014). They usually create a sense of "small" or "little" or express affection.

2.1.4 Syntax

Baby talk is characterized as having a unique syntax, usually in a simplified form. In order to convey meaning to their infants, parents utilize baby talk in the form of short utterances rather than full sentence structures. It is also highly grammatical. Ungrammatical sentences are found to occur but rarely. As Chomsky (1967) claimed, "A perfect grammar could not be learned from imperfect data, unless innate language ideas were available to assist acquisition." Baby talk phrases and sentences feature as skipping out small words, such as *to, at, for, my, so* and *as*, and articles (*the, a, an*).This usually leads to an incomplete sentences, such as "*I need go potty*" or "*I want blanket*". Sometimes, care givers use demonstratives instead of pronouns (*he, I, it, she* etc.) which guide infants learn people's names, for example, "*Daddy wants Susie to eat her cereal*" instead of standard adult speech, "*I want you to eat your cereal*" as pronouns are often confusing to young children. 'Labeling' is practiced in baby talk too, in the form of emphasizing a word through repetition within a sentence, such as *"That's a doll, Susie. It's a doll."* One reason of this kind of repetition is that parents rely heavily on a small number of constructions that combine a small "sentence frame" with a noun phrase or a nominal.

2.1.5 Phonology

The words in baby talk show certain general characteristics either as modifications of normal words or special lexical items. The items, in the first place, include the basic kinds of consonants, stops and nasals in particular and just a very small selection of vowels. Acoustic investigations of baby talk, in many languages appear to favor higher overall pitch, wider and smoother pitch excursions in intonation contours, slower tempo, and greater amplitude than adult-directed speech. Effectively, they may double the range for intonation– and produce higher intonation peaks with steeper rises and falls. This results the effect of exaggerated intonation patterns. Baby talk also is commonly known as tensed vowels and longer pauses between phonemes. These features give infants enough time to process the information being conveyed to them. In addition, rhythm is greatly emphasized here specially overspread in loudness, and is used closely with the focus on various syl-

lables. Besides, accurate phoneme discrimination is allowed by expanding vowel space in baby talk. Difficult words both in terms of phonology or the sounds, from which they are made, might be simplified.

2.2 How baby talk can help?

As mentioned above, baby talk features as a slower and more repetitive tone comparing to normal adult conversation and the speech is more likely in shorter and simpler utterances. Do infants pay greater attention to speech with such features? The answer appears to be yes: They show a clear preference for it, from an early age over adult-directed speech (e.g., Fernald, 1985; Panneton, Cooper, & Aslin, 1990; Werker, Pegg, & McLeod, 1994; Zangl & Mills, 2007). Infants appear to be more attentive to very high pitch in speech, and the younger they are; the more attentive they are (Werker & McLeod, 1989). The use of "baby talk" by adults , help infants pick up their language   words faster since they pay more attention when   their parents use baby talk .The more the infants pay attention, the more they are likely to focus on the word forms (make mental representation of each word) and statistical patterns in speech. Enhanced attention may also help them remember and recall in the future these patterns better (Thiessen, Hill, & Saffran, 2005). Since baby talk contributes to the modulation of infant attention, it assists infants in determining relevant syntactic qualities. They are supported to detect syntactic boundaries. Moreover, it simplifies linguistic patterns for the infants compared to the moments adult-directed speech is used. Through baby talk, infants tend to acquire word order which slowly expands into a deeper understanding of complete sentence structure.

Recent researchers have stressed the instructional function of baby talk in the sense that parents tend to exaggerate the target speech sounds. These exaggerated modeling of natural language forms and contrasts have been argued to support early perceptual (statistical) learning (Fernald, 2000; Liu et al., 2003; Werker et al., 2007) which provide young children with information about language structure and function. The children are also provided with the ability to discriminate different speech sounds and gain clear information about boundaries either for the final words or the whole utterance while the parents are using shorter and simpler utterances and combining falling intonation and a pause marks at the end of utterances in a highly reliable style while speaking to them. Because the seemingly nonsense words of baby talk involve the sounds that the infant may easily reproduce just after hearing them, they are proved to contribute in helping the production of vocabulary and the development of grammar. Also, greater use of diminutive suffixes has been suggested to assist in word segmentation (Kempe, Brooks, &Gillis, 2005). In addition, because this kind of modified speech enjoys several visual cues, infants are deeply motivated to be engaged in communication. As an example, since baby talk involves body movements, it may visually help in conveying meaning of language to infants. Movement of the lips is another visual aspect of baby talk that is, infants are more likely to focus on the face of the parents as they make the opening of the lips larger. Therefore, due to this heightened visual cue, infants are better able to grasp the message being conveyed.

A noticeable aspect about baby talk is the continuation of the effects of early linguistic experiences over time: Researchers from the Universities of Washington and Connecticut, after closely analyzing the audio recording of 26 kids reported that the more baby talk parents used, the more their infants began to babble. Those two year old youngsters, who had heard the most baby talk from the parents and knew an average of 433 words, show a surprising result by their babbling. On the other hand, babies whose parents had not been talked to them knew an average 433 words. "Those children who listened to a lot of baby talk were talking more than the babies that listened to more adult talk or standard speech," says co-author Nairán Ramírez-Esparza at the University of Connecticut. In a follow-up of the original study, a group of children between age five and ten were assessed repeatedly. It was found that the   socioeconomic status related differences existed before these children entered school predicted their later verbal skills in comprehension and production of language, and their levels of achievement on standardized tests at age nine to ten (Walker, Greenwood, Hart, & Carta, 1994). The more language children heard early on, the better their scores and their general progress in school.

However, a rather different view is that how adults modify their speech in talking to young children is irrelevant to acquisition. All that children need is exposure to the sounds and sound patterns, and to the mappings of meanings onto forms. Given that exposure, they simply follow their own course, with development of syntactic structure unfolding as a matter of maturation (Radford, 1990). Indeed, exposure to radio or television does not require the child participate in any exchange: The talk all goes one way, so the child is merely an over hearer. Some researchers (Sachs, Bard, & Johnson, 1981; Sachs & Johnson, 1976) studied one child, Jim a 9-year old, who received such exposure to spoken English. At the age of 3, Jim had only a very small vocabulary, possibly picked up from a few playmates, plus a few words from television jingles. While he did produce some multiword utterances using English words, he did not use English word order (e.g., I want that make, off my mittens), and he omitted word-endings (plural -s, past tense -ed) that three-year-olds would normally have already acquired. His language was far behind other children of his age. He had very limited direct exposure to spoken language with another person although he had overheard a great deal of speech. Once he started to speak with an adult regularly, his language developed rapidly. Sachs and her colleagues concluded that simple early exposure to a language without direct interaction does not necessarily contribute in children first language acquisition. The same study has been repeated many times (Kuhl, 2003) and the same result obtained.

2.3 Why do adults speak to infants and young children differently from other adults?

Pedagogy, attention, affection, and information are among the reasons why adults try to speak to infants and young children differently from other adults:

Many features of baby talk are primarily pedagogical in character. To fulfill the job, according to Clark (2009), parents need to make sure they and their infant is attending to the same objects or events, that there is a   joint attention on the target topic, so she can then direct it to the relevant event. To do this, they use devices to signal that their infant and no one else is the intended addressee: They use a vocative (the child's name) or an endearment (Sweetheart!); they use a deictic term as a summons (Here! Look! See!); and they mark their utterance with higher than normal pitch, for example, to distinguish it from utterances that might be designed for other addressees.

Baby talk serves an important goal such as getting infants' attention especially in phonology. Listening to mothers addressing infants, one may notice the frequencies that in baby talk hold the baby's attention. Another device is to make speaking volume higher. For example, a loud "Stop!" will generally get an infant to halt in her tracks, even if she doesn't yet understand the meaning of the word. However, getting the infant's attention is the first step. The next is holding it. To do this, speakers seem to focus on getting the child-addressee to attend to the message being communicated. Adults have to go a step further, if they want to make themselves understood. They generally select appropriate words and present them in such a manner that their child can recognize in the speech stream: presenting the target terms at the ends of short utterances or in frames where they are perceptually salient, simply identified, and easily understood. Effectively, adults check up on what children have said with clarification questions, in making sure children can make themselves understood, adult speakers make explicit corrections of pronunciation and of word-choice (Clark, 2009).

The use of baby talk to infants seems to be a signal for protectiveness and affection characteristic of the parents relation with the baby. Some linguistic features of baby talk (e.g., use of high pitch, repetitions, supplying both questions and answers) tend to be the features of affection and attention, not just pedagogy (Guerreo & Floyd, 2006).

Although an important function of language is indeed sharing the information, structurally, it is also the most neutral. Strict conveyance of information does not require any special language forms. Throughout the baby talk literature, there are no baby talk features that are described exclusively as communicating information. Exchanges that are strictly informational in character do take place between parent and child (e.g., "*Mom, I want cake*"), but the language itself has none of the distinguishing features we have been observing. The same can be said for "information only" speech directed to adults

(Belanger, 2017).

2.4 Universality of baby talk

All cultures expose children to language somehow and that baby talk is certainly not harmful. It been seen in other languages such as Japanese, Italian, Mandarin, British English, American English, French, and German .This is the basis for claims that baby talk is a necessary aspect of social development for children. Researchers Greg Bryant and Clark Barrett, of the University of California, Los Angeles, speculated that the relationship between sound and intention is universal and should be understood by everyone, regardless of their native language. There can be seen similarities in the baby talk words that parents employ with children in various languages: "mother": *Mummy* (English) *mama* (Arabic, Swahili, Greek) *maman* (French) *mutti* (German), *ma* (Berber) All of them have 'm' sounds and 'a' or 'u' vowels. In many languages, reduplication has a grammatical role of some sort in the adult language, but in baby talk reduplication is considered as a feature and is generally separate and unrelated to the use in the normal language. Not only are there apparent universals in production, but there is strong evidence that infants everywhere have a complementary response bias. Infants generally prefer to listen to infant speech over adult speech regardless of the gender of the voice (e.g., Werker & McLeod, 1989). However, according to Clark (2009) social class may interfere in the way parents talk to their infants.

Family size may affect the language experiences of children. Adults in crowded homes spoke to their children in simpler, less sophisticated ways than adults in less-crowded homes. And adults in the more crowded settings were less responsive verbally to their children. By age, first-born child was more advanced in lexical and grammatical improvement than later-born child; however, later-born child was more advanced in conversational skills (Huttenlocher et al., 1991).

3. Final Remarks

Baby talk is a simplified speech register having special lexical items and constructions, but it is mostly identified by its distinctive paralinguistic features. The findings suggest that this universal modified speech is a non- negligible part of the infants' speech. Baby talk may make it easier to hear the sounds of speech. As a result, the candidate functions for baby talk –simplifying, clarifying, and expressive –viewed it as promoting language acquisition in children. It should be mentioned that, more attention should be applied to comprehend the relationship between quality and quantity of language input, as well as various forms of input, like speech from native or non-native speakers. This paper suggests that those parents who engage in baby talk improve their children's learning of language. While the exact mechanisms behind the facilitating the impact of baby talk require being further investigated, it is clear that this type of speech keeps children's attention to the speech stream and helps focus on some of the linguistic components children need to explore in the language they hear. Moreover, the social context where baby talk is embedded, as well as the child's role in asking for it, requires further consideration. Baby talk offers potential lessons in how to take turns and in what to say when. It also reflects extensive information about how words map onto the world – information on how to talk about different situations, which words to use for what. Baby talk also contribute to the modulation of infant attention , assist infants in determining relevant syntactic qualities including phonetic boundaries and convey positive emotions to infants. In addition, infants begin the process of speech and language acquisition through baby talk (Jordan, Lgnatius, Antje, & Yana, 2010).

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