A Case Study on Acquisition of the Sentence Final Particle "MA" in a Chinese-speaking Child

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Abstract: The development of particle is an important part of children's language acquisition. This study selected a child's long-term tracing corpus (one year old to three and a half years old), and examined the development of the child's sentence final particle (SFP) "MA" in detail. By analyzing the development of "MA" of all ages, the quantitative analysis data of the sentence final particle "MA" on the age group can be obtained, and the particle's acquisition stage from the perspective of cognitive development is analyzed.

1. Introduction

In recent years, the international community began to focus on the development of preschool children's language. Mood is a kind of grammatical category that expresses the complex subjective feelings of human beings. The means of expressing the tone are intonation, sentence change, modal particle and other tone composition (modal adverb, auxiliary verb and interjection), and modal particle is the most basic form of Chinese tone. In the language of Chinese children, modal particles appear very early, and take mistakes rarely. Why are children so sensitive to the perception of modal particles? This is worthy of our in-depth study. However, the development of children's modal particles has not been given enough attention. Furthermore, the development of the whole language system of children's language has not been favored by scholars. This is not related to the fact that the ontology of modal speech has not developed. This study attempts to reveal the mechanism of children's modal particle acquisition by referring to the research results of the predecessors in the process of children's language development, hoping to promote the further development of children's other modal particles the study.

First, the paper of Li Yuming and Chen Qianrui's (1998) which using the Chinese question system as a material, investigates the problem of language understanding and language development of Chinese children by using the method of case experiment and longitudinal observation. In the group experiment, the author used the "Xiao hong mao zhang de hao kan MA?" to examine the particles "*MA*", the results show that different questionnaires have no effect on understanding in this age group. In the case study, the particle "*MA*" occurs at the age of 2 years. When children grow up to 2 years and 11 months, the negative form of *"MA"* question appears, and these questions are less doubtful, or even no interrogative sentence. Finally, this study concludes that a positive form of a non-questioning occurs before a negative form of a non-question. And in general, a sentence where a child has a question is asked before a sentence that is no doubt.

Second, Kong Lingda, a professor of Anhui Normal University, his two graduate students Qian Yijun (2003) and Li Huimin (2005), respectively, choose the children's language acquisition about particles as the title of graduation thesis. They used the case method sub-age population surveys and case follow-up survey which discuss the development of the children's modal system. But their longitudinal research corpus is made up of two children's corpora. In their study, *"MA"* occurs in 2 years and 6 months. They examined the object which the particles *"MA"* and *"BA"*'s tone attached, revealed the characteristics and processes of children how to learn the particles *"MA"*, and

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discussed some relevant issues. To sum up, we believe that in the case of vertical investigation, it should be a continuous track of a child. This thesis studies the corpus which is a child's continuous track in order to make up for the lack of corpus collection. "How can the particle *'MA'* is learned by children early?" and "What the characteristics do the children process?" These questions are worthy of our further study.

2. The Usage of the SFP "MA"

This research takes one year old boy as an object with the study video records in the natural state uninterrupted once a week until two and a half years. The aim is to collect a large number of corpora and investigate the acquisition of the children's particles *"MA"* as well as analyze the development of the SFP*"MA"* of the children's language acquisition by tracking this stage's video survey.

The corpus of this study is from a boy (a year and three months) who was born in Linyi city, China. In the video, the boy, his parents, his sister and his grandmother take turns to speak. Their utterances are transcribed into CHAT corpus and annotated according to CHILDES standards. The corpus is analyzed by CLAN program (XieNan & ZhangDi, 2017). During the 119 times of recording, the modal particle *"MA"* in the corpus has appeared 1512 times in all, and that was where the corpus of this study derived from.

From some previous studies, mood expressing human beings' complicated emotion belongs to grammatical category. In this study, we study the mood that can be divided into three different subcategories. It contains declaration mood, imperative mood, and interrogative mood. *"MA"* can be used in imperative, declaration and interrogative moods. (Li, 2005; Zhang, 2001). The use of *"MA"* can be divided as follows.

"MA" is regarded as an imperative particle which can express advice, requests, orders, and urges. Examples are provided below.

Rang wo kankan *MA.*

Let me see *MA.*

'Please let me see it.'

This sentence is an imperative sentence. *"MA"* in this sentence indicates that the speaker's disagreement, possibly combined with indignation or impatience at the hearer's opposite point of view and trying to persuade the hearer. To some extent, *"MA"* in this example expresses the meaning of the request.

Chapppell (1991) claims that *"MA"* is to remind the listener that the entire proposition is obvious or self-evident from the preceding discussion or from their common cultural knowledge. An example is provided below.

zhe bu shi tutu *MA?*

This is not tutu *MA*?

'Is this tutu?'

This sentence is a declaration sentence. *"MA"* in this sentence indicates that the speaker's view combining with some doubts or the affirmation of the speaker.

"MA" in interrogative mood often indicates that the speaker does not know the answer to a question and he/she wants the speaker to answer it. The example will be shown below.

Guan shang men MA?

Close the door MA?

'Do you want to close the door?'

This sentence is an interrogative sentence. *"MA"* in this sentence indicates the speaker's doubts. The speaker expects to get the answer from the questioner, and sometimes the usage of *"MA"* makes the sentence with containing the idea which the speaker wants to get some advice from the hearer.

3. The Findings of the SFP "MA" in the Corpus

"MA" appeared for the age of 1; 10;25 in the corpus. The conversation will be provided in.

*MOT: hao le *BA*	*CHI: Hao le.	*CHI: Ke yi *MA*?
OK *BA*	OK *LE*.	Can *MA*?
'Are you OK?'	'OK.'	'Is this OK?'

In this context, the above sentence shows interrogative mood. The child wanted to wash his hands, then the child's mother asked the boy whether he wanted to wash his hands and agreed the child to wash his hands. And after the child washed his hands, he asked his mother whether his hands was clean or dirty. In this sentence, the use of *"MA"* indicates that the child is not sure about the factuality.

"*MA*" accounts for 10.49% of sentence final particles. There are 1848 sentences produced by WMX with the final ending "*MA*". Among them, there are 1279 sentences expressing interrogative mood, 427 sentences expressing declarative mood and 142 sentences expressing imperative mood. The Figure 4 shown below illustrates the percentages of the three different moods with "*MA*".

4. The Explanation for the Acquisition of the SFP"MA"

Through the analysis of the SFP "*MA*" in the child's language, we can see that the SFP "*MA*" frequency of the child is increased after 2;03 indicating that the child learns the SFP "*MA*" before 2;03. How does the child learn to use this particle?

Children learn the language through a lot of methods. The development of children's language is inseparable from adult's language demonstration. In the early childhood, imitation is one of the important method which children use to learn a language. The process of learning SFPs have experienced from mechanical imitation to selective imitation. We have removed the direct imitation of the sentence in the time of statistical corpus, since this mechanical imitation is not the speech output of the child. Children learn the particle meaning by using of indirect, selective imitation mainly. They also will take some strategies when they learn to use particles. The first step is learning from the simple strategy. The same tone can be expressed by different grammatical forms, for example, the usage of "*MA*" in an interrogative sentence of judging right or wrong not only can express the interrogative, but also through the repeated questioning the structure of affirmative and negative to express. When a child acquires a language form, it inhibits the acquisition of other forms and delays the acquisition of another forms of expressing the tone. Second, there is a tail strategy. The tone is attached to the end of the sentence where is the most likely place to attract the attention of children. The usage of the end of the strategy is conducive to the acquisition of particles.

At present, there are two theories about children's language acquisition mechanism. Tomasello (2003) as the representative of the basis of the development of syntactic theory. The theory confirms that the development of children's language is the process of the organic unity of biological germination, the process of social and cultural evolution and the individual process. It indicates the unity of language acquisition and language cognitive process confirming the general field of language acquisition. But this theory denies the existence of universal grammar, and holds that the development of language should be placed in the framework of cognitive and social competence. Chomsky (1965) as the representative of the congenital module theory. This theory establishes the language processing and accesses to the field of particularity. It holds the view that the language is a special instinct and different from other animals. People have a natural language knowledge which exists in the human brain in the form of universal grammar. We can not avoid the processing modularity of the language symbol system.

We find that the rapid expansion of the frequency and usage of surge learning particle "*MA*" in children's language only through point view of imitating and without pragmatic reasoning. Children's acquisition of language must have a mechanism to support, but this usage of innate things in the end is the universal grammar and the general cognitive mechanism is also worth more detailed and in-depth study. Children's particles appeared early and developed rapidly, indicating

that the acquisition of children's particles is mainly communicative function Driven, that is, pragmatic first (Halliday, 2007). At the same time, the role of cognitive development is indelible, so we think that children learn particles are the result of pragmatic and cognitive synthesis. According to the children's language acquisition process of pragmatic characteristics, social context and language input on the acquisition of children's modal particles is particularly important.

5. Conclusions

Children with their physiology get development, at the same time, mental development has also been important. They began to come out from the self-centered world, take the initiative to the outside world to express their physical needs and maintain their growth for food, clothing. Before children can express their will in the imperative sentence, or even in the pre-language stage, they use the eyes, gestures body language to express their demands. If children want to meet their own needs, only it is not enough by a potential gestures or the body language. They also need language to help them. Psychological needs ask for children become more and more intense in their growth process. When their own ideas can not get satisfaction, their minds will have doubts, and express their own questions in the language. So the emergence of the interrogative sentence is prompted and then the SFP"*MA*" expressing the interrogative tone comes into being.

The present study investigates a Mandarin speaking child WMX's acquisition of the SFP "*MA*" from 1;03 to 3;06. The main aim of the study is to discuss the availability of the SFP "*MA*" from semantic and syntactic perspectives. Based on WMX's corpus, the present study finds that the first emergence of the SFP "*MA*" is at 1;10;25, and most of "*MA*" indicate interrogative mood. This thesis explains why WMX early acquires "*MA*" from semantic and syntactic perspectives. In semantic view, "*MA*" stands for different degrees, that is to say, "*MA*" marks low degree. When children acquire "*MA*", it means children could use his words to express his doubt. We assume that there is an acquisition mechanism in children's mind. When they are growing, they gradually acquire it.

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