

# Chapter One

## Introduction

### 1.1 Motivation

Classifiers are words used in various languages to indicate the syntactic or semantic classification of words. Chinese is a language with numeral classifiers which are obligatory in a noun phrase containing a numeral or a demonstrative (Allan 1977). To be more specific, in English, count nouns can be counted by putting the numeral directly in front of the noun (e.g., *five apples*, *three horses*), but mass nouns can only be counted with the help of so-called measure words (e.g., *three pieces of cake*, *a school of fish*). In Chinese, by contrast, all nouns are like English mass nouns in the sense that, in order for a noun to be countable, a measure word or a classifier is required, as in (1) and (2).

#### (1) mass nouns

- a. *san*      *ping*      *jiu*  
three      CL-bottle      liquor  
'three bottles of liquor'
- b. *san*      *wan*      *tang*  
three      CL-bowl      soup  
'three bowls of soup'

#### (2) count nouns

- a. *san*      *ge*      *ren*  
three      CL      person  
'three persons'

b. *san zhi bi*  
three CL pen  
'three pens'

The function of classifiers is to indicate the semantic category of nouns, to provide information about physical properties (e.g., shape, animacy, etc.), functional properties (e.g., hand tool, vehicle, etc.) or the social status of the referent of the head noun (Adams and Conklin 1973, Allan 1977). Therefore, nouns are categorized into different semantic classes as indicated by classifiers.

The use of classifiers in Chinese has been widely examined in the literature. In the last few years, more and more researchers have started to pay considerable attention to children's acquisition of Chinese classifiers (e.g., Fang 1985, Erbaugh 1986, Hu 1993, Chien et al. 2003). The results are often satisfactory. It has been found that children seem to demonstrate a sound knowledge of the basic syntactic nature of classifiers (e.g., order and phrase structure) at a very young age. However, previous studies on children's acquisition of Chinese classifiers mainly discuss count classifiers. Cheng and Sybesma, in their 1998 paper "Yi-wan Tang, Yi-ge Tang: Classifiers and Massifiers" argue that Mandarin exhibits two types of classifiers (count and mass), which help to differentiate mass nouns and count nouns grammatically. They further conclude that in Chinese, the difference between mass nouns and count nouns is grammatically reflected at the level of classifiers. In other words, count-mass distinction is indeed relevant in Chinese grammar.

The present research was prompted by a desire to learn more about Chinese children's use of count and mass classifiers in order to echo Cheng and Sybesma's claim that the count-mass distinction indeed plays a crucial role in Chinese grammar. Hence, the aims are twofold: (1) to examine whether empirical evidence supports the

linguistic analyses of the count-mass distinction, and (2) to probe into children's use and misuse of count and mass classifiers.

## 1.2 Theoretical Background

The present study is an attempt to come to a better understanding of the language acquisition process of count and mass classifiers. First of all, the prototype<sup>1</sup> theory, formulated by Rosch (1975, 1978), will be adopted in analyzing the data collected.

Since the pioneering work of Rosch and her advocates in the early 1970's, the classical approach to categorization<sup>2</sup> has faced a tough challenge. Unlike traditional theories stating that an object is categorized as an exemplar of a category if and only if the object possesses the defining properties of that category, the prototype theory proposes that newly encountered objects are identified as members of a category by comparing them with a prototype which is the best or most typical example of the concept which was learned earlier (Saeed 2003). According to the prototype theory, members of a category are associated with each other in the fashion of "family resemblances" (Tai 1994, Saeed 2003). Therefore, all members of a category do not necessarily possess a common objective feature which criterially defines that category. Some members are simply more typical of the word's meaning because they possess more of the word's features than others. The prototype theory is more compatible with the facts of human categorization than the classical theory and thus is used to account for the representation meaning of adults (Ingram 1989).

The prototype theory also highlights the notions of centrality and gradation. The

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<sup>1</sup> It is a term used in semantics and psycholinguistics for a typical member of the extension of a referring expression (Crystal 1997).

<sup>2</sup> The basic assumptions of this classical view of categorization are: (1) A category is defined in terms of a conjunction of necessary and sufficient criterial features; (2) Features are binary; (3) Categories have clear boundaries; (4) All members of a category have equal status (Taylor 1989).

boundaries between categories are fuzzy. Some members serve as ‘better’ or ‘typical’ examples of that category, possessing more properties than others. For instance, robins and sparrows are prototypes of birds. They are the central members. By comparison, chickens, penguins and ostriches are peripheral (because of their atypical characteristics, notably their inability to fly)—though the category may be differently organized in different cultures or groups (Crystal 1997).

The notion of the “prototype” holds considerable promise for the semantic analysis of classifier categories. Classifier categories often contain members which have apparently drafted into the category because they bear a metonymic or metaphorical relationship to pre-existing members of the category, not because they possess some set of criterial attributes (Tai and Wang 1990, Tai 1992, Tai 1994). For example, the classifiers *tiao* is used with long, thin, cylindrical, and flexible concrete objects. Entities such as *shengzi* ‘rope,’ *xianglian* ‘necklace’, and *xiaohuanggua* ‘cucumber’ are prototypical exemplars. The classifiers *tiao* can also be used with its naturally extended members such as *yi tiao jie* ‘a street’ and metaphorically extended members such as *yi tiao xinwen* ‘a piece of news.’ Through the prototype effect, both types of extension can be directly derived from their associations with the central members, which perceptually indicate long shape.

Secondly, one of the more complex problems of language acquisition concerns semantic development. Neither the form nor the underlying mechanisms of the evolution of meaning are well understood. Here, we will adopt Clark’s (1973) semantic feature hypothesis (SFH) to account for children’s semantic acquisition. According to this hypothesis, children assemble the adult meanings of words by adding semantic features one by one. For instance, the first meaning of “dog” might be [+animate], and later [+animate, +four legged]. Acquisition then goes from the more general to the more specific. Also, the first features acquired might be those

perceptually salient to the child. The most primitive categories include animacy, movement, shape, size, sound, and taste. According to Clark, word meaning consists of both perceptual features and functional features<sup>3</sup>, and perceptual features take precedence in the acquisition. In light of this, it would be intriguing to probe into whether the children's emergence order of classifiers associating with different semantic domains reflects the perceptual saliency order.

Finally, the present study will address methodological issues. For the purpose of investigating preschoolers' comprehension and production, two tasks will be designed. The first task is a picture description task. This elicited production technique enables the experimenter not only to control the meaning associated with the target utterance but also to evoke sentences corresponding to syntactic structures which occur rarely in children's spontaneous speech (McDaniel et al. 1996). That is, the elicited production technique can help uncover the extent of children's grammatical knowledge. The second task is a picture identification (or picture selection) task, which has been used to assess nearly all types of linguistic comprehension abilities. It can test children's sensitivity to aspects of language which they do not produce. It is necessary to see how these two types of tasks are related to each other and how different task formats influence children's linguistic performance. Observations in which young children show sensitivity to a linguistic form before they produce the same form have often been taken to support a widely assumed model of language development. In this model, comprehension is earlier than production (McDaniel et al. 1996). Hence, if a child produces a particular form today, this form might have become part of the child's grammar at some point in the past.

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<sup>3</sup> Perceptual features are features determined for an object by the senses, e.g., shape, smell, and touch. For example, "ball" can be categorized by a perceptual feature [+ round]. Functional features are those involving the uses of the objects. A ball, for example, is something which can be thrown, kicked, or hit in a game or sport.

### **1.3 Research Questions**

Based on the theoretical background discussed above, the present study aims to address the following research questions:

1. Do Chinese preschoolers respond differently to the count-mass distinction?
2. Do Chinese children of different age groups respond significantly differently to count and mass classifiers?
3. Do Chinese preschoolers perform similarly on comprehension and production tasks in their acquisition of count and mass classifiers?
4. Is there a hierarchy of difficulty in Chinese children's acquisition of count and mass classifiers?
5. What is the semantic feature governing preschoolers' misuse of count and mass classifiers? Does preschoolers' misuse exhibit any overgeneralization?

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

There is a great abundance of literature regarding children's acquisition of Chinese classifiers. Nevertheless, most previous studies dealt exclusively with count classifiers, and thus shed no light on children's use of mass classifiers. Furthermore, most studies merely focused on children's correct use of classifiers in production, rather than both comprehension and production.

The present study is significant in that it aims to investigate Chinese children's acquisition of count and mass classifiers by conducting an experiment with two tasks, a comprehension task and a production task. It is hoped that a more comprehensive explanation for children's acquisition of Chinese classifiers can be provided, and that language researchers can gain more insight from this study about issues of children's count-mass distinction, age effects, task effects, hierarchy of difficulty in children's acquisition of classifiers, and their misuse of the general classifier *ge*.

## **1.5 Organization of the Thesis**

This thesis is organized as follows. Chapter Two discusses the linguistic properties of count and mass classifiers and provide a classification. The relevant literature of classifiers will also be reviewed, among which five are related to linguistic analyses and the other four are concerned with the empirical studies of classifier acquisition. Chapter Three introduces the experimental design of the study. The subjects, methodologies, materials, procedures (pilot study, pretest, formal testing, scoring) will be reported. Forty-five participants involved will be asked to complete two types of tasks, i.e., comprehension and production tasks. Chapter Four presents and discusses the results of the present study. Finally, Chapter Five summarizes the major findings and presents the limitations of the study along with suggestions for further research.