

**NOMINAL STRUCTURE  
IN LI<sup>4</sup> ZHI<sup>1</sup> JI<sup>4</sup> 荔枝記(WANLI 萬曆 EDITION)\***

Liching Livy Chiu<sup>1</sup> and Chinfa Lien<sup>2</sup>

<sup>1</sup>*Ministry of Science and Technology*

<sup>2</sup>*National Tsing Hua University*

**ABSTRACT**

This paper explores possible structures of determiner phrases (DPs) using the corpus of *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup> 荔枝記 (Wanli 萬曆 (1573-1620) Edition of Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup> 荔鏡記)*, the text of a colloquial Early Southern Min (1566 AD) play. First, the available structures for nominal expressions involving Demonstratives (DEM) *tsi<sup>1</sup>* 只, Numerals (Num) *chit<sup>4</sup>* 一, Classifiers (CL) *ge<sup>5</sup>* 个/個, and Nominal Phrases (NP) are of the three types: Type X1 ([+DEM][+CL]), Type X2 ([+DEM][-CL]), and Type Y ([-DEM]). Second, some of the possible structures, e.g. “DEM + NP” and “Num +NP”, which do not exist in Mandarin and Southern Min, suggest different structural analyses for DPs in Early Southern Min.

Keywords: DP, demonstratives, classifiers, nouns, Southern Min

---

\* This article is completed within Liching’s employment in the Research Institute for the Humanities and Social Science at National Science Council (NSC101-2811-H-002-057). We would like to acknowledge a debt of gratitude to NSC for its partial support (NSC-94-2411-H-007-002). Thanks also go to Ray Huang, Hui-Chi Lee, Shi-Chi Stella Yeh, and our proofreader Caitlin Keenan at Harvard University.

## 1. INTRODUCTION

This paper examines the possible structure of various kinds of determiner phrases (DPs) in Southern Min (SM), as recorded in the 16th century playscript *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記 (*Wanli* 萬曆 (1573-1620) Edition of *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>* 荔鏡記) (吳 2001a, 2001b). In its fullest form, an SM DP consists of Determiner / or Demonstrative (D) + Numeral (Num) + Classifier (CL) + Noun phrase (NP). We perform a dialectal study to quantitatively compare DPs/NPs in the *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>* corpus to their (modern) Mandarin and Southern Min counterparts.<sup>1</sup>

Each element in DP is associated with its own features, as shown in (1). D involves the grammatical category of deixis, which comprises the features [proximal] and [distal]. Choice of [proximal] yields *tsi<sup>2</sup>* 只, while choice of [distal] yields *hir<sup>2</sup>* 許. *tsi<sup>2</sup>* 只 will be adopted as the representative of the D category in this paper; we leave *hir<sup>2</sup>* 許 to future work.<sup>2</sup> For Num, we focus our attention on the numeral *tsit<sup>8</sup>* 一 ‘one’. Among the paradigmatic set of classifiers (CL) such as *ge<sup>5</sup>* 个, *ui<sup>7</sup>* 位, *tin<sup>7</sup>* 陣, etc., we focus on the default classifier, *ge<sup>5</sup>* 个. NP is the open class of noun phrases.

- (1) Grammatical categories and features
  - a. deictics<sup>3</sup>: proximal and distal

---

<sup>1</sup> Abbreviations mostly follow the Leipzig Glossing Rules. Abbreviations not included in the Leipzig Glossing Rules: Num (numeral), PFX (prefix), SPF (sentence-final particle), SUF (suffix).

<sup>2</sup> The spelling of Southern Min in this paper is based on the Church Romanization given in Douglas (1873), with some minor modifications. The diacritic tone marks have been replaced by numerical superscripts. The numeral superscripts 1, 2, 3, 4, 5, 7, 8 and 0 stand for 陰平 *yīnpíng*, 陰上 *yīnshǎng*, 陰去 *yīnqù*, 陰入 *yīnrù*, 陽上 *yángshàng*, 陽去 *yángqù*, 陽入 *yángrù*, and the neutral tone respectively. *Ts* and *tsh* are used to stand for *ch/ts* and *chh/ tsh*, respectively, since each pair makes no phonemic contrast. Open *o* and closed *o* are rewritten as *oo* and *o* respectively, as in *po<sup>3</sup>* 布 ‘cloth’, *po<sup>3</sup>* 報 ‘report’. Double *n* following a vowel indicates nasalization, as in *thinn<sup>1</sup>* 天 ‘sky’. The vowels /ə/ and /u/, which are uniquely found in the Quánzhōu variety, are represented as /er/ and /ir/ respectively. The Romanization of Chinese examples is based on the Quánzhōu subdialectal information found in Douglas (1873), with the exception of some obvious Cháozhōu forms, such as *tann<sup>3</sup>* 呔 ‘speak’ and *thoinn<sup>2</sup>* 體(<睇) ‘look’.

<sup>3</sup> These are feature indications, not syntactic categories.

- b. number: singular and plural
- c. class: characteristics of each individual
- d. NP: referent of open-class noun phrase

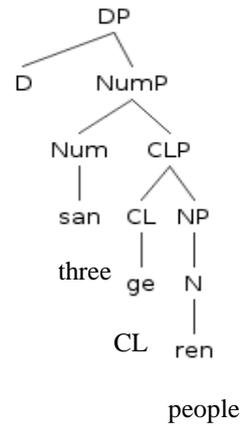
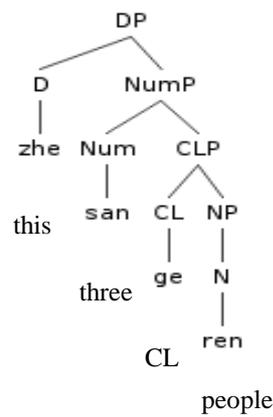
The organization of this paper is as follows: **Section 2** presents a summary of the literature on each element in the DP domain. 2.1 and 2.2 survey the general structure of DP; 2.3 - 2.5 discuss demonstratives, numerals, and classifiers, respectively. **Section 3** discusses the results we have obtained via our corpus. A general description is given in 3.1, while three major types of DPs isolated in our study are discussed in 3.2.1 through 3.2.4. We discuss DPs with DEM (Type X1 with CL ([+DEM][+CL]) and Type X2 without CL ([+DEM][-CL])), DEM-less DPs (Type Y ([-DEM])), and DPs with pronouns (Type Z). **Section 4** concludes the study.

## **2. LITERATURE REVIEW**

### **2.1 Constituency of the Chinese DP**

The Chinese noun phrase includes functional elements such as demonstratives, numerals, and classifiers, but lacks article-type determiners. Based on the observed order of elements in the Chinese DP — Demonstratives-Numeral-Classifier — and the (generative grammar) principle of Spec-Head agreement, Huang, Li & Li (2009) propose the analysis of Chinese nominals shown in (2). (See also Li (1999) for a more detailed discussion of Num and its interaction with other elements). (2)a illustrates the case where all these functional heads are realized simultaneously in the structure. This is a full-fledged DP structure for an individual-denoting expression, where Num<sup>0</sup> is filled by a numeral, CL<sup>0</sup> by a classifier, and N<sup>0</sup> by a common noun. (2)b, on the other hand, is ambiguous between a quantity-denoting and an individual-denoting nominal. More discussion of these semantic distinctions will be introduced in Section 2.3.

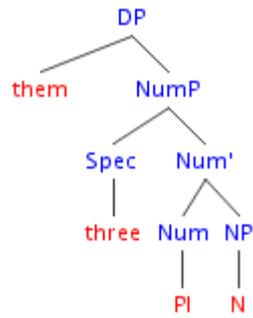
- (2) a. 這三個人<sup>4</sup>  
 zhe san ge ren  
 this three CL people
- b. 三個人  
 san ge ren  
 three CL people



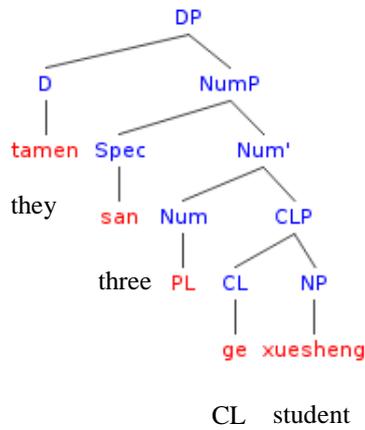
The structure shown in (2), however, is not uncontroversial. For instance, Li (1999) argues that the behavior of *men* ‘plural marker’ can be better captured by the structures in (3). As shown in (3), the pronoun which precedes the demonstrative is located in [Spec, DP]. In both structures in (3), Num<sup>0</sup> hosts a Plural feature which requires checking. Feature checking of this type is not a problem in a language like English, because the noun can move directly to the Num head; however, in Chinese, head-to-head movement is blocked due to the presence of an intervening CL between the Plural feature and the NP (Huang, Li & Li 2009). Instead of moving, the Plural feature is realized on whatever element is in D. This explains why the [number + CL] segment must come after *men*, and why *men* can only attach to pronouns, proper names, and certain nouns that act like proper names. An exception to this rule occurs when CL is empty, in which case nouns can move up to D and attach to *men*.

<sup>4</sup> The Romanization of Mandarin examples follows the standard Pīnyīn Romanization convention.

(3) a. English  
them three



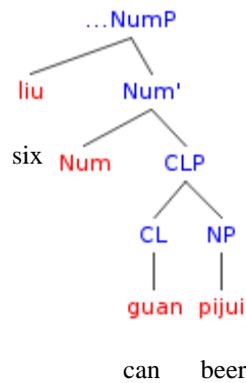
b. Chinese  
他們三個學生  
tamen san ge xuesheng  
they three CL student



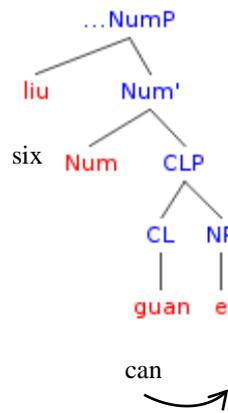
## 2.2 Structure of DP in Early SM

An interesting aspect of the Chinese DP is that the Classifier head (CL) projects, and can license empty categories (4)b. However, as illustrated in the following sections, the classifier in early SM does not carry the same weight. As we will show in Section 3, Type X2b “*tsi*<sup>2</sup> + NP” and Type Ye “*tsi*<sup>8</sup> + NP”, which contain no classifier, are productive in early SM.

- (4) a. 六罐啤酒  
 liu guan pijui  
 six bottle beer  
 ‘six bottles of beer’



- b. 六罐  
 liu guan  
 six bottle  
 ‘six bottles’



Let us return to the structure for *men* proposed by Li (1999), illustrated in (3). In both structures, a Plural feature appears in Num<sup>0</sup>, and this feature needs to be checked. However, as we have already noted, in Chinese, the CL head intervenes between the Plural feature and the NP, blocking movement. The only exception to this rule occurs when CL is empty, in which case nouns can move up to D and attach to *men* 們.

The special, CL-less patterns found in *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup> 荔枝記*--- “NUM + NP”, together with the fact that the Pl feature is not realized as *men* 們 in early playscripts, indicates that NUM cannot remain in [Spec NumP] in early SM. If it were to stay in this position, the projection of Num would not be properly hosted by a head. Furthermore, early SM provides no evidence for the structure in (3)b; CLP needs not be projected in the “NUM + NP” structure at all. This observation contrasts with our intuition that CL is an important functional head within DP. Finally, as far as we understand, “NUM + NP” in *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup> 荔枝記* shows no effect of movement to the D head.

### 2.3 Demonstratives<sup>5</sup> (指示詞)

If demonstratives are located in D, then, following the structure in (2), we should expect the order [demonstrative + number + classifier + noun], as exemplified in (5). The presence of a demonstrative does not entail a definite expression. Indeed, it is possible to include a demonstrative in the D<sup>0</sup> position of an indefinite number expression, in particular the interrogative demonstrative *na* (falling-rising tone), as in (6).

(5) a. 這三個人  
zhe san-ge ren  
this three-CL person  
'these three people'

b. 那三個人  
na san-ge ren  
that three-CL person  
'those three people'

(6) 哪三個人  
na san-ge ren  
which three-CL person  
'which three people'

Demonstratives can also be followed by a classifier directly, without a number, as shown in (7). The resulting expression is always interpreted as singular, as though there were a deleted *yi<sup>1</sup>* "one" in the number position.

---

<sup>5</sup> Diessel (1999) examines the distribution of demonstratives across the world's languages. He finds that demonstratives (or determiners) appear in four environments: (a) as a pronoun in the argument position of a verb or preposition; (b) as an adnominal inside a nominal; (c) as an adverbial modifying a verb, and (d) as an identifier or linker in copular sentences.

- (7) a. 這個人  
zhe ge ren  
this CL person  
'this person'
- b. 那個人  
na ge ren  
that CL person  
'that person'
- c. 哪個人  
na ge ren  
which CL person  
'which person'

In modern Southern Min, two demonstratives occur: *tsit<sup>4</sup>* 'this' and *hit<sup>4</sup>* 'that' (9a).<sup>6</sup> The latter encodes distal deixis (*hit<sup>4</sup>* 'that'), referring to an object (non-human or human) that is physically removed from the speaker, whereas the former encodes proximal deixis (*tsit<sup>4</sup>* 'this'), referring to something that is closer to the speaker. The distinction between distal and proximal (Diessel 1999) is retained in the plural forms of these demonstratives: *tsia* 'these/here' and *hia* 'those/there'<sup>7</sup> (9b); however, the plural forms cannot co-exist with classifiers in the Southern Min.

- (8) English : a. this/that kid [-Plural] ;  
b. these/ those kids [+Plural]

---

<sup>6</sup> Note that the phonetic representation *tsit<sup>4</sup>* in modern Southern Min can be analyzed as a morphophonemic merger of *tsi<sup>2</sup>* 只 'this' and the numeral (*ts*)*it<sup>8</sup>* — 'one' in certain contexts. Surface forms can be misleading.

<sup>7</sup> As indicated in the English gloss, *tsia* and *hia* can also be locational *pro*-forms 'here' and 'there', which do not show number features.

- (9) Southern Min :     a. *tsit<sup>4</sup> /hit<sup>4</sup>* ki pit ‘this/that pen’ ;  
                          b. *tsia<sup>2</sup> /hia<sup>2</sup>* e pit ‘these/ those pens’

The demonstrative does not have to agree with the following numeral (Num) or nominal (NP) in number. Based on these facts, Tang (2005) argues against a Spec-head configuration for the demonstrative, and suggests a modification relationship between the demonstrative and subsequent nominal material. In this article, notwithstanding the presence of *hir<sup>2</sup>* 許 we investigate only *tsi<sup>2</sup>* 只 ‘this’ in early Southern Min texts.

#### 2.4 Numeral (數詞) / Number expressions

Huang, Li & Li (2009) discuss number expressions which occur in the order [number + classifier + noun]. Such numerals can be sub-categorized into at least two types according to their semantics. Number expressions are generally understood as non-definite expressions; they often cannot be used in subject or topic position due to a ban on indefinite expressions in such positions in Chinese (10)-(11).

- (10) a. ?? 三個學生吃了點心                   (Huang, Li & Li 2009:288)  
          ??san-ge xuesheng chi-le dianxin  
          three-CL student eat-Perf cookies  
          ‘Three students ate the cookies.’
- b. ?? 三個學生很聰明  
          ?? san-ge xuesheng hen congming  
          three-CL student very smart  
          ‘Three students are smart.’
- (11) a. \*三個學生，我以為吃了蛋糕  
          \*san-ge xuesheng wo yiwei chi-le dangao  
          three-CL student I think ate-Perf cake  
          ‘Three students, I thought (they) ate the cake.’

- b. \*三個學生，我以為很聰明  
san-ge xuesheng wo yiwei hen congming  
three-CL student I think very smart  
'Three students, I thought (they) were smart.'

Bare nouns in the subject/topic position are always interpreted as definite (12)(13).

- (12) a. 學生吃了蛋糕 (Huang, Li & Li 2009:289)  
xuesheng chi-le dangao  
student eat-Perf cake  
'The students ate the cake.'  
Not: '(Some) students ate the cake.'

- b. 學生很聰明  
xuesheng hen congming  
student very smart  
'The students are smart.'  
Not: '(Some) students are smart.'

- (13) a. 學生，我以為吃了蛋糕  
xuesheng, wo yiwei chi-le dangao  
student I think eat-Perf cake  
'The students, I thought (they) ate the cake.'  
Not: '(Some) students, I thought (they) ate the cake.'

- b. 學生，我以為很聰明  
xuesheng wo yiwei hen congming  
student I think very smart  
'The students, I thought (they) were smart.'  
Not: '(Some) students, I thought (they) were smart.'

However, there are certain situations in which number expressions are allowed in the subject/topic position. These occurrences all involve a "quantity-related predicate", as in (14)-(15).

- (14) a. 三個學生不夠  
san-ge xuesheng bu gou  
three-CL student not enough  
'Three students are not enough.'
- b. 三個學生，我想是不夠的  
san-ge xuesheng wo xiang shi bu gou de  
three-CL student I think is not enough DE  
'Three students, I think are not enough.'
- (15) a. 三個學生大概吃不完兩個蛋糕  
san-ge xuesheng dagai chi-bu-wan liang-ge dangao  
three-CL student probably eat-not-finish two-CL cake  
'Three students probably cannot finish two cakes.'
- b. 三個學生，我想大概吃不完兩個蛋糕  
san-ge xuesheng wo xiang dagai chi-bu-wan liang-ge dangao  
three-CL student I think probably eat-not-finish two-CL cake  
'Three students, I think probably cannot finish two cakes.'

All of the number expressions in (14) and (15) denote a quantity, not a group of individuals, and are referred to as “quantity number expressions” in Huang, Li & Li (2009). By contrast, the number expressions in (10) and (11) denote a group of individuals rather than a quantity (these are referred to as “non-quantity individual-denoting expressions” or “indefinite expressions” in Huang, Li & Li’s discussion). Why are quantity number expressions, but not indefinite expressions, acceptable in the sentence/topic position? Li (1998) points out that the two types of expressions display a range of contrasting syntactic behaviors. The most important of these differences is that indefinite expressions can co-refer with, and become binding antecedents for, pronouns such as *ta* (he/she) and *ta men* (they) (16). Quantity number expressions, however, cannot interact with pronouns in this way, even when c-command requirements are fulfilled (17).

- (16) a. 我叫兩個學生<sub>i</sub>回去把他們<sub>i</sub>的車子開來  
wo jiao liang-ge xuesheng<sub>i</sub> huiqu ba tamen<sub>i</sub> de chezi kai lai  
I ask two-CL student return BA them DE car drive over  
'I asked two students to go back and drive their car over.'
- b. 你如果找到兩個幫手<sub>i</sub>，  
ni ruguo neng zhaodao liang-ge bangshou<sub>i</sub>  
you if can find two-CL helper  
就趕快把他們<sub>i</sub>請來  
jiu gankuai ba tamen<sub>i</sub> qing lai.  
then hurry BA them invite come  
'If you can find two helpers, hurry and invite them over.'
- c. 他明天會看到三個人<sub>i</sub>，  
ta mingtian hui kandao san-ge ren<sub>i</sub>  
he tomorrow will see three-CL people  
還會跟他們<sub>i</sub>做朋友  
hai hui gen tamen<sub>i</sub> zuo pengyou  
and will with them make friends  
'He will meet three people tomorrow and will make friends with them.'
- (17) a.\*三個人<sub>i</sub>抬不起兩架你給他們<sub>i</sub>的鋼琴  
san-ge ren<sub>i</sub> tai-bu-qi liang-jia ni gei tamen<sub>i</sub> de gangqin  
three-CL man lift-not-up two-CL you give them DE piano  
'Three people cannot lift two (of the) pianos that you gave to them.'
- b.\*兩個大人<sub>i</sub>不如他們<sub>i</sub>的三個小孩有力量  
liang-ge daren<sub>i</sub> bu ru tamen<sub>i</sub> de san-ge xiaohai you liliang  
two-CL adult not compare they DE three-CL children have strength  
'Two adults are not as strong as their three children.'

- c. \*如果兩張床睡得下三個人<sub>i</sub>，  
ruguo liang-zhang chuang shui-de-xia san-ge ren<sub>i</sub>  
if two-CL bed sleep-able-complete three-CL person

我就請他們<sub>i</sub>來  
wo jiu qing tamen<sub>i</sub> lai  
I then invite them come  
'If two beds can accommodate three people, I will invite them over.'

The sentences in (16)a-c all involve indefinite expressions, while those in (17)a-c all involve quantity number expressions. If (17)a-c are to be accepted at all, the quantity number expressions must be interpreted as referring to individuals in the same way as indefinite expressions do. The same also applies in the case of reflexives:

- (18) a. 張三<sub>i</sub>知道三個人一定  
Zhangsan<sub>i</sub> zhidao sange ren<sub>j</sub> yiding  
Zhangsan know three people certainly

搬不動自己<sub>i/j</sub>的鋼琴  
ban-bu-dong ziji<sub>i/j</sub> de gangqin  
move-not-move self DE piano  
'Zhangsan knows that three people certainly cannot move his own piano.'

- b. 張三<sub>i</sub>叫三個人<sub>j</sub>回去  
Zhangsan<sub>i</sub> jiao san-ge ren<sub>j</sub> huiqu  
Zhangsan ask three-CL people return  
把自己<sub>i/j</sub>的鋼琴搬來  
ba ziji<sub>i/j</sub> de gangqin ban lai.  
BA self DE piano move over  
'Zhangsan asked three people to go and move his own piano over.'

## 2.5 Classifiers (量詞)

Chinese is a language with a rich system of classifiers and measure phrases. Classifiers (and modifiers<sup>8</sup>) can be distinguished from other similar measure phrases through their syntax and grammatical functions. According to Tai & Wang (1990), three tests distinguish between measure phrases and classifiers:

(19)

- a. **Syntactic distribution:** *de-* 的 cannot appear between a classifier and an N, but it can appear between a measure phrase and its NP. For example, \*一張的桌子 *yi-zhang de zhuozi* 'one-CL DE desk' is an ill-formed NP, while 十磅的肉 *shi-bang de rou* 'ten-pound DE meat' is grammatical.
- b. **Substitution:** The default CL *ge* 個 can be substituted for any classifier, without any semantic changes. So 一張桌子 *yi-zhang zuozi* 'one-CL desk' and 一個桌子 *yi-ge zuozi* 'one-GL desk' are both acceptable. Replacing a measure phrase with *ge*, however, does change its denotation. For instance, we cannot replace *bang* 'pound' in 十磅肉 *shi-bang rou* 'ten-pound meat' with CL *ge*: \*十個肉 \**shi ge rou* 'ten GE meat'.
- c. **Usage:** The uses of classifiers vary among dialects, but the uses of measure phrases tend to be consistent cross-dialectically.

One lexeme, represented by *ge*<sup>5</sup> 个, is the linker within DP, *de-*, in Mandarin Chinese. *e*<sup>5</sup> or *ge*<sup>5</sup> 个 can also be used as a default classifier. As noted in (19)b above, it can replace most other, more restricted, classifiers without changing the meaning of the original NP (Loke 1983;

---

<sup>8</sup> Here, 'modifiers' refers to bare adjectival and *de*-marked possessive, relative, and adjective modifiers.

Guo1987). Furthermore, if a nominal phrase is not modified by a more restrictive classifier, *ge<sup>5</sup>* 个 must be used (Hu 1984; Erbaugh 1986). Although the intuition is not unproblematic, Loke (1994) provides examples and several syntactic tests to show that it is more economical and reasonable to treat 個<sup>9</sup> as four or five separate classifiers with different semantics. In this article, we consider *ge<sup>5</sup>* to be a representative of the category of classifier. Data shown in this article, however, are not limited to the default classifier.

### 3. THE DP STRUCTURE OF NOMINALS IN *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記

The goal of this paper is to pin down the functions of the various kinds of determiner phrases (DP) in Southern Min (SM), as recorded in the 16th century playscript *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記 (Wu 2001b). We sort through the relevant data in our corpus to arrive at a distributional result for each element within DP and its quantitative token. One thing to note is that there are four editions of *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>* / *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔鏡記/荔枝記 (Wu 2001a-d). The statistical tokens shown in Table 1 are based on the *Wanli* 萬曆 Edition of *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記, and the tokens for CL in the tables refer to 个 only. We have relied on the *Wanli* 萬曆 edition in this case because it includes the most examples and demonstrates each usage. However, for the examples shown in the paper, the text of the *Jia<sup>1</sup> Jing<sup>4</sup>* 嘉靖 editions (also named *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>* 荔鏡記) was also considered in order to find the most representative cases.

The basic skeleton of a DP in its fullest form consists of Determiner (DEM) + Numeral (Num) + Classifier (CL) + Noun phrase (NP). Each slot in the DP is occupied by elements sharing a paradigmatic relationship, and each constituent carries its own features, as shown in (1), repeated in (20). DEM involves the grammatical category of deixis, which comprises the features [proximal] and [distal]. The choice of [proximal] yields *tsi<sup>2</sup>* 只 and that of distal yields *hir<sup>2</sup>* 許. Num contains a set of numerals, CL, a group of classifiers, and NP, the open class of noun phrases. We focus our attention on the numeral *tsit<sup>8</sup>* 一 ‘one’ for

<sup>9</sup> In *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>* 荔鏡記, sometimes 個 and 个 are used as the same morpheme, and are mutually replaceable.

Num. For CL, a paradigmatic set of classifiers exists, such as *ge*<sup>5</sup> 个, *ui*<sup>7</sup> 位, *tin*<sup>7</sup> 陣, etc. NP, as already mentioned, has open class membership.

(20) Grammatical categories and features

- a. deictics: proximal and distal
- b. number: singular and plural
- c. class: characteristics of each individual
- d. NP: referent of open-class noun phrase

### 3.1 Overview of the Results

An analysis of the constituents in the DP in *Li*<sup>4</sup> *Jing*<sup>4</sup> *Ji*<sup>4</sup> 荔鏡記 turns up the distribution in Table 1. The results illustrate a wide range of NPs, from a bare nominal to a full-fledged, four-constituent DP. Although the structure containing every functional element of DP — DEM + Num + CL + NP — are, as expectedly, grammatical, it is surprising that only 33 tokens of this full structure occur in the playscript, making it the fifth most productive distribution among the possible DEM frames.

Table 1.

DEM	Num	CL <sup>10</sup>	NP	Tokens
tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	NP	33
tsi <sup>2</sup> 只	*	ge <sup>5</sup> 个	NP	6
tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	*	4
tsi <sup>2</sup> 只	*	ge <sup>5</sup> 个	*	2
tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	*	NP	5
tsi <sup>2</sup> 只	*	*	NP	166
tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	*	*	0
tsi <sup>2</sup> 只	*	*	*	89 <sup>11</sup>
*	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	NP	54
*	*	ge <sup>5</sup> 个	NP	1 <sup>12</sup>
*	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	*	3
*	*	ge <sup>5</sup> 个	*	0
*	tsit <sup>8</sup> 一	*	NP	51
*	*	*	NP	the NPs
*	tsit <sup>8</sup> 一	*	*	0

As shown in Table 1, the first major division is between DPs that contain a demonstrative and those that do not. We represent these two varieties as [Type X] (DEM-present DP), and [Type Y] (DEM-less DP). Type X falls into two subtypes: Type X1, for DPs which contain both a DEM and a CL, and X2 for DPs which contain a DEM but lack a CL. Below, we list each type along with its corresponding token count. Further details about each structure are provided in the following sections.

<sup>10</sup> In this article, we include only the element *ge*<sup>5</sup> as a representative of the category CL, in order to avoid the complexity involved in sorting different classifiers. Data shown in this article, however, is not limited to the default classifier *ge*<sup>5</sup> 个.

<sup>11</sup> There are 11 instances in which *tsi*<sup>2</sup> 只 behaves as a nominal, while there are 77 pieces of data showing *tsia* 只 with the locative meaning ‘here’.

<sup>12</sup> There are 8 tokens of the other possessive *ge*<sup>5</sup> 个.

**X1 with CL**<sup>13</sup>

- a. DEM + Num + CL + NP: (33)
- b. DEM + CL + NP: (6)
- c. DEM + Num+ CL: (4)
- d. DEM + CL: (2)

**X2 without CL**

- a. DEM + Num +NP: (5)
- b. DEM + NP: (166)
- c. DEM + Num: (0)
- d. Dem: (89)

The distribution of our data also reveals a co-occurrence restriction within the elements of DP. Impossible combinations include: “DEM + Num”, “CL + NP”<sup>14</sup>, “CL”, and “Num”. As a result, there are relatively few tokens containing only numerals or only classifiers in the DP data. Even when DEM and NP are available, as in the structures “DEM + Num +NP” and “DEM + CL+ NP”, the patterns are grammatical but the frequencies are relatively low. Patterns X1 and X2 will be discussed further in 3.2.1-3.2.2, respectively.

The second half of Table 1 shows structures with no demonstratives (DEM), categorized as Type Y, as shown below:

**Type Y: DEM-less DP**

- a. Num + CL + NP: (54)
- b. CL + NP: (1)
- c. Num + CL: (3)
- d. CL:(0)
- e. Num + NP: (51)
- f. NP (open class)
- g. Num : (0)

---

<sup>13</sup> The numerals in parentheses stand for the number of tokens of each type.

<sup>14</sup> One case of this structure was, in fact, present in the sample. However, the extant token (shown in (38)) was not a legitimate example of this structure, for reasons that will be explained in Section 3.2.3.

Except for some instances of the structures (Ya) “Num + CL + NP” and (Ye) “Num + NP”, there are very few tokens of this type. (Yf) “NP” represents the bare NP with no functional elements; there were too many tokens of this type for us to count or list here. In the next section, we will examine each pattern listed in Table 1 in detail.

### Type Z: Pronoun + DEM + NP

This type of construction differs significantly from the structures included in Table 1, due to the presence of a pronoun inserted in front of the demonstrative. However, we find it essential to address this type in order to arrive at a full picture of DP. We will discuss this type of construction in 3.2.4.

## 3.2 The Patterns

### 3.2.1 Type X1 (DEM with CL)

In this section, we discuss in detail the patterns containing both the demonstrative *tsi<sup>2</sup>* 只 ‘this’ and the classifier *ge<sup>5</sup>* 个. Four patterns of this type are attested. Their distribution is repeated in Table 2, below.

Table 2.

Frame	DEM	Num	CL	NP	Token
X1a	<i>tsi<sup>2</sup></i> 只	<i>tsit<sup>8</sup></i> 一	<i>ge<sup>5</sup></i> 个	NP	33
X1b	<i>tsi<sup>2</sup></i> 只	*	<i>ge<sup>5</sup></i> 个	NP	6
X1c	<i>tsi<sup>2</sup></i> 只	<i>tsit<sup>8</sup></i> 一	<i>ge<sup>5</sup></i> 个	*	4
X1d	<i>tsi<sup>2</sup></i> 只	*	<i>ge<sup>5</sup></i> 个	*	2

Pattern X1a, the fullest DP form (DEM + Num + CL + NP), may be exophorically deictic, referring to an object (non-human or human) physically distal or proximal to the speaker, or endophorically deictic, acting as an anaphor conferential with an NP in an intimate context (Diessel 1999). An example of pattern A (X1a) is shown in (21).

- (21) Kho<sup>2</sup> hiau<sup>2</sup>-tit<sup>4</sup> tsi<sup>2</sup> tsit<sup>8</sup> tin<sup>7</sup> niu<sup>5</sup>-kann<sup>2</sup> tsiann<sup>2</sup> si<sup>7</sup> ti<sup>7</sup> kue<sup>1</sup> hang<sup>7</sup>  
tsiunn<sup>7</sup> lang<sup>5</sup>  
(生) 可曉得只一陣娘仔正是值街巷上人 (8.059-8.060 JJ)  
ADV know this group woman-SUF exactly be which street alley  
on person  
'Do you know exactly which street or lane this group of women  
are from?'

Pattern X1b is (DEM + CL + NP). We found only 6 examples of this pattern; one example is shown in (22).

- (22) Tsi<sup>2</sup> phun<sup>5</sup> tsui<sup>2</sup> tsuah<sup>4</sup> mua<sup>2</sup>  
只盆水拙滿 (22.110 JJ)  
this basin water so full  
'This basin of water is so full.'

Pattern X1c (DEM + Num + CL) can function as an exophoric demonstrative or as an anaphor, with the missing NP recovered from the immediate context or context (23)(24). It can also serve as a discourse marker to introduce a topic carrying old information (25).

- (23) Tsi<sup>2</sup> tsit<sup>8</sup> ui<sup>7</sup> si<sup>7</sup> mih<sup>8</sup> lang<sup>5</sup>  
(末) 只一位是乜人 (49.123 JJ)  
this one CL be what person  
'Who is this?'
- (24) Tsi<sup>2</sup> tsit<sup>8</sup> tsuann<sup>2</sup> tsiann<sup>3</sup> si<sup>7</sup> mih<sup>8</sup> ting<sup>1</sup>  
(丑) 只一盞正是乜燈 (6.146 JJ)  
this one CL exactly be what lamp  
'What kind of lamp is this?'
- (25) Tsi<sup>2</sup> tsit<sup>8</sup> te<sup>3</sup> kho<sup>2</sup> sue<sup>3</sup> khit<sup>4</sup> sio<sup>2</sup>-be<sup>7</sup> bue<sup>2</sup> tsiam<sup>1</sup>- suann<sup>3</sup>  
(生) 只一塊可小，乞小妹買鍼線 (25.211 JJ)  
this one CL ADV small give little sister buy needle thread  
'Though this piece (of silver) is small, I'd like to give it to you to  
buy needle and thread with.'

Pattern X1d (DEM + CL) arises through the contraction of the DEM and Num in Pattern X1c. In the construction DEM-CL (26)-(27), DEM bears deictic information concerning spatial orientation with reference to the location of the speaker or addressee's location, while CL classifies the noun phrase based on certain semantic properties. DEM-CL is a shortened form of DEM + Num + CL, where Num denotes an individual whose identity can be recovered from the context. Note that Pattern X1c and X1d may take on different semantic functions with passage of time in terms of the bi-uniqueness (viz., one-form-one-meaning) principle.

(26) Tsi<sup>2</sup> ge<sup>5</sup> beh<sup>4</sup> thoo<sup>7</sup> gua<sup>2</sup> bue<sup>2</sup> jiu<sup>2</sup> tsiah<sup>8</sup>  
 只个卜度我買酒食 (45.153 JJ)  
 this CL want let I buy wine eat  
 'He wants to give it to me to buy wine with.'

(27) Niu<sup>5</sup>-kann<sup>2</sup> tsi<sup>2</sup> e<sup>5</sup> khah<sup>4</sup> khin<sup>1</sup>  
 (生) 娘仔, 只个可輕 (26.588 JJ)  
 lady-SUF this CL more light  
 'This is lighter, lady.'

### 3.2.2 Type X2 without CL

Type X2 DPs contain the demonstrative *tsi<sup>2</sup>* 只 'this', but no classifier *ge<sup>5</sup>* 个. The most productive case is Pattern X2b, "DEM + NP"; the pattern "DEM + Num" is ungrammatical.

Table 3.

Frame	DEM	Num	CL	NP	Token
X2a	tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	*	NP	5
X2b	tsi <sup>2</sup> 只	*	*	NP	166
X2c	tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	*	*	0
X2d	tsi <sup>2</sup> 只	*	*	*	89

Pattern X2a (DEM + Num + NP) retains the (exophoric or endophoric) referring function, but may also take on an affective

function in some cases. An example is given in (28). There are subtle differences between Patterns X2a and X2b and between Patterns X1c and X1d in terms of the bi-uniqueness principle. The numeral *one* is fused in its frame in both X2b and X1d, and this fusion affects the interpretation. Both X2b and X1d imply emotional involvement, in which the speaker is demonstrating intimacy, closeness, or relation to the object denoted by the NP.

- (28) Tsi<sup>2</sup> tsit<sup>8</sup> au<sup>7</sup>-sinn<sup>1</sup> ku<sup>3</sup> khoo<sup>2</sup>-ok<sup>4</sup>  
只一後生句可惡 (43.014 JJ)  
this one young.man ADV disgusting  
'This young guy is nevertheless so disgusting.' (Reproachfully)

Pattern X2b (DEM + NP), in which *tsi*<sup>2</sup> 只/ or *hir*<sup>2</sup> 許+ NP occurs without a numeral or classifier, is the most productive frame of Type X2. This is particularly worth noting because the same pattern is not grammatical in modern Mandarin Chinese or the other dialects; take (29) for instance.<sup>15</sup>

- (29) \*這人很聰明  
\*zhe-ren hen congming  
this person very smart  
'This man is very smart.'

It may be that the DEM + NP pattern in X2b arose from an earlier fusion of DEM + CL, yielding a monosyllabic form with a dental stop ending. Possible evidence in support of this hypothesis comes from the fact that DPs in the X2b form are always definite and uniquely identified<sup>16</sup>. (30)-(31) illustrate this point. Although patterns X1b (DEM

---

<sup>15</sup> Our thanks to an anonymous reviewer, who points out that one can still find very rare examples of this pattern. To cite an example that he or she provides, *zhe ren que shi lao wong* 這人卻是老翁 DEM person but is old man 'this man is an old gentleman, though.'

<sup>16</sup> An anonymous reviewer notes that, even if X1b bears unique reference and definiteness, this only indicates the presence of DEM; however, our point is still supported by the distribution of numerals in the data (with CL) previously mentioned in the paragraph.

+ CL + NP) and X1a (DEM + NUM +CL + NP) are highly productive in modern Southern Min, both are unexpectedly infrequent in the *Wanli* version of *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>* 荔鏡記. This surprising distribution suggests that the high frequency of X2b (DEM + NP) may partially stem from mergers that have occurred between these two patterns.

- (30) San<sup>1</sup>-ko<sup>1</sup> li<sup>1</sup> serh<sup>4</sup> tsi<sup>2</sup> ue<sup>7</sup>  
 (貼) 三哥你說只話 (25.230 JJ)  
 third old.brother you say this word  
 ‘You say this, Third Brother.’
- (31) Tsi<sup>2</sup> tsu<sup>1</sup> sio<sup>2</sup>-be<sup>7</sup> m<sup>7</sup> sang<sup>3</sup> khir<sup>3</sup>  
 只書小妹不送去 (25.231 JJ)  
 this letter little younger.sister not deliver go  
 ‘(Since you said it,) I won’t deliver this letter.’

Below, we list some more examples of “Pattern *tsi<sup>2</sup>* 只 + NP” (32)-(36). The functions and interpretations of these examples are somewhat equivalent to its full-fledged DP counterparts. When no Num is used, the number interpretation is realized as ‘one’. Similarly, the omitted classifiers in these examples can all be interpreted as deleted instances of *ge<sup>5</sup>* 个, the default classifier.

- (32) Gun<sup>2</sup> am<sup>3</sup>-tsing<sup>7</sup> ti<sup>7</sup> tsi<sup>2</sup> hue<sup>1</sup>-hng<sup>5</sup> siunn<sup>2</sup> hue<sup>1</sup>  
 阮暗靜在只花園賞花 (24.303 JJ)  
 I calm at this garden enjoy flower  
 ‘I enjoy viewing the flowers in the garden quietly.’
- (33) Gua<sup>2</sup> tsi<sup>2</sup> sim<sup>1</sup>-kuann<sup>1</sup> uat<sup>8</sup> tiann<sup>3</sup>  
 我只心肝越痛 (26.574 JJ)  
 I this heart more ache  
 ‘I am even more heart-broken.’

- (34) Kin<sup>1</sup>-tuann<sup>3</sup> jah<sup>4</sup> tshut<sup>4</sup> tsi<sup>2</sup> tai<sup>7</sup>-tsi<sup>3</sup>  
今旦惹出只事志 (36.019 JJ)  
now cause exit this matter  
'(I) brought about this matter now.'
- (35) Gua<sup>2</sup> tsit<sup>8</sup> sim<sup>1</sup> kiong<sup>2</sup>-ui<sup>3</sup> tsi<sup>2</sup> lang<sup>5</sup> m<sup>7</sup> si<sup>7</sup>  
我一心恐畏只人不是 (26.250 JJ)  
I whole-hearted scare this man is not  
'I am simply afraid that this isn't the man.'
- (36) Tsi<sup>2</sup> kiann<sup>3</sup> si<sup>7</sup> sio<sup>2</sup>-lang<sup>0</sup> bua<sup>5</sup> kng<sup>1</sup> liau<sup>0</sup>  
只鏡是小人磨光了 (19.252 JJ)  
this mirror COP lesser.man polish light INCHOATIVE MARKER  
'It is me (the humble self) that polished the mirror.'

Pattern X2d (DEM), the barest form of DP, contains only a single deictic element, *tsi<sup>2</sup>* 只 or *hir<sup>2</sup>* 許. This form can be used as a distal demonstrative. Since this type of DP only provides information on deixis, it is likely to be ambiguous. It can refer to an animate object only when it occupies the subject position of a sentence and the main verb is a copula, as in (37)a. Uses of the bare demonstrative in *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>* 荔鏡記 can be divided into two semantic types. One refers to location, with a meaning similar to that of the locative adverb "here" in English; the other is a genuine pro-form replacing an individual-denoting NP. Replacement of an entire DP with a bare demonstrative is quite productive in *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>*.

- (37) a. Hir<sup>2</sup> tsiann<sup>3</sup> si<sup>7</sup> au<sup>7</sup>-kau<sup>1</sup> Ng<sup>5</sup>-kiu<sup>2</sup>-long<sup>5</sup> tsu<sup>1</sup>-niu<sup>5</sup>-kann<sup>2</sup> mia<sup>5</sup>  
kio<sup>3</sup> goo<sup>7</sup>-niu<sup>5</sup>  
許正是後溝黃九郎攷娘仔，名叫五娘 (9.038-039 JJ)  
that exactly be rear ditch Huang Jiu-lang woman-DF  
'That is exactly Huang No 9's daughter called Wu Niang from Back Ditch.'

- b. Tsua<sup>2</sup> pit<sup>4</sup> ti<sup>7</sup> tsi<sup>2</sup> <sup>17</sup>  
 紙筆在只 (25.101 JJ)  
 paper pen at this  
 ‘Paper and pen are here.’

Another obvious difference between earlier SM and modern SM is found in the use of *tsi<sup>2</sup>*. In the early SM typified by *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記, *tsi<sup>2</sup>* 只 can appear alone as a proximal demonstrative. In modern SM, this is not possible. Instead, a fusional form, *tsit<sup>4</sup>*, is used, which arises from the merger of *tsi<sup>2</sup>* (this) and *tsit<sup>8</sup>* (one). (Note that *tsit<sup>8</sup>* has a –t coda). A similar process occurs in English, where we can have *this book* but not *this one book*, even though *this book* denotes singularity. If we accept the possibility that *tsi<sup>2</sup>* 只 can stand for either *tsi<sup>2</sup>* alone or a fusional version of *tsi<sup>2</sup>* (this) + *tsit<sup>8</sup>* (one), then the realization of Type X2d may be ambiguous. This ambiguity may contribute to the high token count for this type. However, it is important to note that *tsi<sup>2</sup>* 只 is acceptable in the object position in earlier Southern Min texts, as in (37b), whereas it is ill-formed in modern Southern Min and *tsia<sup>2</sup>* 遮 ‘here’ is used in place of *tsi<sup>2</sup>*.

### 3.2.3 Type Y: DEM-less DP

The next type of construction surveyed contains no demonstrative at all. Our research shows that structures lacking demonstratives are less likely to be grammatical; we found fewer instances of grammatical structures of Type Y than of Type X in our script. The ungrammatical structures include: (Yb) “*ge<sup>5</sup>* 个 + NP”, (Yg) “*tsit<sup>8</sup>* 一”, and (Yd) “*ge<sup>5</sup>* 个” alone. In other words, neither the classifier *ge<sup>5</sup>* 个 nor the numeral “*tsit<sup>8</sup>* 一” can stand as a legitimate *pro*-form for the entire DP. Thus, the demonstrative “*tsi<sup>2</sup>* 只” is distinguished from numerals and classifiers in its ability to substitute for an entire DP.

---

<sup>17</sup> Given that this example was written in Chinese characters in *Li<sup>4</sup> Jing<sup>4</sup> Ji<sup>4</sup>*, we are unclear as to whether 只 is a legitimate instance of *tsi<sup>2</sup>*, or if it is actually a fusional word incorporating a localizer, like *tsia<sup>1</sup>* in modern Taiwanese southern Min. Whatever the case, a localizer is required to turn it into a locative phrase.

Table 4.

Frame	DEM	Num	CL	NP	Token
<b>Ya</b>	*	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	NP	54
<b>Yb</b>	*	*	ge <sup>5</sup> 个	NP	1
<b>Yc</b>	*	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	*	3
<b>Yd</b>	*	*	ge <sup>5</sup> 个	*	0
<b>Ye</b>	*	tsit <sup>8</sup> 一	*	NP	51
<b>Yf</b>	*	*	*	NP	the NPs.
<b>Yg</b>	*	tsit <sup>8</sup> 一	*	*	0 <sup>18</sup>

Although the pattern Ya (Num + CL + NP) is well-formed both in our script and in modern dialects of Chinese, the pattern Ye (Num + NP) is only available in *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記. It is not only grammatical in this text, but also occurs in a wide range of semantic contexts. However, this same pattern is not grammatical in either modern SM or in Mandarin Chinese. It seems that a change in the lexicon has occurred which has caused the frame Ya (Num + CL + NP) to expand its scope and replace Ye.

In pattern Yb, eight out of the nine data points contained the possessive marker *ge<sup>5</sup>* 个, which is distinct from the classifier of the same form. The only example containing a classifier, (38), is itself quite surprising, since *ge<sup>5</sup>* 个 is not even the correct classifier for the nominal *ling<sup>3</sup>-xhuang<sup>4</sup>* 領狀 ‘paper’. It is reasonable to attribute this special case to an instance of cross-contamination from Mandarin in the setting of a court hearing. We conclude that pattern Yb is an ill-formed structure in Southern Min, but acceptable in early modern Mandarin.

A note concerning frames Yb and Ye: in modern SM and Mandarin, the co-presence of Num and CL is obligatory. Thus, neither “CL + NP” (ex: *\*zhi<sup>1</sup> niu<sup>2</sup>* \*隻牛 ‘CL cow’) nor “Num+ NP” (ex: *\*yi<sup>1</sup> niu<sup>2</sup>* \*一牛 ‘one cow’) is acceptable. By contrast, Num + NP occurs regularly in early SM (viz., Type Ye).

<sup>18</sup> Here we do not include the counting word “one”.

- (38) Qu<sup>3</sup> ge ling<sup>3</sup>-xhuang<sup>4</sup> shang<sup>0</sup>-lai<sup>0</sup>  
 取个領狀上來 (39.067 WL)  
 take CL paper up  
 ‘Please bring a paper up here.’

The pattern Yc (Num + CL) produced three results<sup>19</sup>. In each of these cases, the intended referent was clearly [+ human], despite the NP itself remaining unpronounced. No instances occurred of Pattern Yg (Num) or Pattern Yd (CL), revealing again the impossibility for either of these elements to substitute for a whole DP.

The token count indicated for Ye “tsit8 + NP (Num + NP)”, 51, is found in the *Wanli* version of *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記, as shown in Table 5. The high productivity of this construction is interesting, as it seems to violate the DP constraint found in modern Chinese dialects, which militates against Num being immediately followed by NP without mediation by CL. Some exceptions exist, such as *tsu<sup>3</sup>* 厝 ‘house’ in *tsit<sup>8</sup> tshu<sup>2</sup> lang<sup>5</sup>* 一厝人 ‘a houseful of persons’; in this case, ‘house’ may be a measure word rather than a CL. Similarly, *tsit<sup>8</sup> e<sup>7</sup>* 一下 ‘once’ in (39) and *tsit<sup>8</sup> tiunn<sup>5</sup>* 一場 ‘one event’ in (40) are cases of NUM + CL or, more precisely, of the “extensive” classifier. *sin<sup>1</sup>* 身 ‘body’ in *tsit<sup>8</sup> sin<sup>1</sup>* 一身 ‘one body’ (41)(42) means “entire body”. However, we also find multi-word NPs, such as *tsit<sup>8</sup> ho<sup>2</sup> long<sup>5</sup>-kun<sup>1</sup>* 一好郎君 ‘one good husband’, and *tsit<sup>8</sup> po<sup>2</sup>-kiann<sup>3</sup>* 一寶鏡 ‘one precious mirror’, in which it is impossible to analyze the middle morpheme (‘good’, ‘precious’) as a CL. We propose that the ability of numerals to occur without an accompanying classifier in this text reflects the fact that the classifier system of Southern Min was still at an emergent (viz., not full-fledged) stage at this time. The texts themselves date back to the 16th century, and in fact, they may represent a much earlier stage of the language that was passed down through oral tradition.

<sup>19</sup> Here the idiomatic uses, such as 好一个 ‘what a...’, or 做一個 ‘all together’, are not included.

- (39) 甲娘仔出來，乞我見一下 (37.026 JJ)  
kah<sup>4</sup> niu<sup>5</sup>-kann<sup>2</sup> tshut<sup>4</sup> lai<sup>5</sup> khit<sup>4</sup> gua<sup>2</sup> kinn<sup>3</sup> tsit<sup>8</sup> e<sup>7</sup>  
let lady come up let I see one down (Verbal-CL)  
'Ask the lady to come up. Let me take a look at her.'
- (40) 一場恩愛水中流 (43.075 JJ)  
Tsit<sup>8</sup> tiunn<sup>5</sup> un<sup>1</sup>-ai<sup>3</sup> tsui<sup>2</sup>-tiong<sup>1</sup> lau<sup>5</sup>  
one event love water in flow  
'An event of love flows down the river.'
- (41) 是誰力我一身潑得障濕 (22.118-119 JJ)  
Si<sup>7</sup> tsui<sup>7</sup> liak<sup>8</sup> gua<sup>2</sup> tsit<sup>8</sup>-sin<sup>1</sup> phuah<sup>4</sup> tit<sup>4</sup> tsiunn<sup>3</sup> sip<sup>4</sup>  
be who PM I whole.body splash EXTMARKER so wet  
'Who is it that causes me to be soaked through by splashing water  
all over me?'
- (42) 恨我一身在別人厝做奴婢 (13.039 JJ)  
Hun<sup>7</sup> guan<sup>2</sup> tsit<sup>8</sup>-sin<sup>1</sup> ti<sup>7</sup> pat<sup>8</sup> lang<sup>5</sup> tshu<sup>3</sup> tsue<sup>3</sup> loo<sup>5</sup>-pi<sup>7</sup>  
hate me self others.house be slave  
'I detest myself for becoming a slave of others.'

### 3.2.4 Type Z: (Pronoun + DEM + NP)

The final DP type, Z, is the structure "Pronoun + DEM + NP". Personal pronouns (PRON) and determiner phrases (DP) may combine to form a single constituent. There are two possible kinds of structure provided by the combination of PRON and DP: (a) a possessive construction, or (b) an appositional construction, corresponding to identificational predication.

- (43) Gua<sup>2</sup> tsi<sup>2</sup> kann<sup>2</sup>-sai<sup>3</sup> bo<sup>5</sup> te<sup>3</sup> tho<sup>2</sup>  
我只仔婿無處討 (30.004 JJ)  
I this son-in-law not.have ask.for  
'I can't find this son-in-law of mine anywhere.'

- (44) Gua<sup>2</sup> tsi<sup>2</sup> sim<sup>1</sup>-kuann<sup>1</sup> uat<sup>8</sup> thiann<sup>3</sup>  
 我只心肝越痛 (26.574 JJ)  
 I this heart.liver more ache  
 ‘I am even more heart-broken.’

Huang, Li & Li (2009) have shown that this frame is NOT structurally appositive in modern Chinese<sup>20</sup>. However, in the *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記 corpus, we find instances of both the possessive meaning, as in (43) and (44), and of an appositive-like meaning which is semantically distinct from the possessive. In (45) and (46), ‘you’ does not have any ownership over ‘*the maid*’ or ‘*the pimp*’, respectively. The translations for these sentences, ‘*You wretched maid!*’ and ‘*You old pimp!*’ must be appositive, since in both cases a pause can be added after ‘you’ without changing the interpretation of the utterance.

- (45) Lur<sup>2</sup> tsi<sup>2</sup> tshat<sup>8</sup> pi<sup>7</sup>  
 你只賊婢 (14.431 JJ)  
 you this thief maid  
 ‘You wretched maid!’

- (46) Lur<sup>2</sup> tsi<sup>2</sup> lau<sup>7</sup>-kien<sup>7</sup>  
 (外) 你只老虔 (36.031 JJ)  
 you this old.pimp  
 ‘You old pimp!’

---

<sup>20</sup> The authors give four arguments and tests for this non-appositive analysis. First, the “PRON + Dem + (Num) + NP” structure does not allow a pause between PRON and Dem (Huang et. al:303-305). No other elements can be inserted in this position, either. Second, the ordering of the two elements in an appositive structure should be free; however, the order of the pronoun and Dem + NP is not interchangeable in Mandarin “Pronoun + Dem + NP”. Finally, the two elements in an apposition structure generally are both definite, but this is not true for the Mandarin structure under discussion.

### 3.3 From the Perspective of Classifiers

Until now, the discussion in this paper has focused on the presence or absence of the demonstrative, the head of DP. However, CL is also considered an important functional head in the literature on Chinese. If we organize our data in terms of the presence or absence of classifiers, we are able to produce another table of distribution. In Table 5, Types 1-8 contain classifiers, while Types 9-15 do not. However, there do not seem to be any interesting generalizations to be drawn on the basis of the distribution of these classifiers in the script of *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記; and we find that a distribution based on the behaviors of demonstratives provides more insightful information. This classifier-bound alternative is noted here as a reference only.

Table 5.

Type	Pattern				Token
1	tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	NP	33
2	tsi <sup>2</sup> 只	*	ge <sup>5</sup> 个	NP	6
3	tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	*	4
4	tsi <sup>2</sup> 只	*	ge <sup>5</sup> 个	*	2
5	*	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	NP	54
6	*	*	ge <sup>5</sup> 个	NP	1
7	*	tsit <sup>8</sup> 一	ge <sup>5</sup> 个	*	3
8	*	*	ge <sup>5</sup> 个	*	0
9	tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	*	NP	5
10	tsi <sup>2</sup> 只	*	*	NP	166
11	tsi <sup>2</sup> 只	tsit <sup>8</sup> 一	*	*	0
12	tsi <sup>2</sup> 只	*	*	*	89
13	*	tsit <sup>8</sup> 一	*	NP	51
14	*	*	*	NP	
15	*	tsit <sup>8</sup> 一	*	*	0

#### 4. CONCLUSION

In this paper, we examined three major distribution patterns found in Chinese DPs, as illustrated in Table 6: Type X: DPs containing a DEM (X1 a-d with CL and X2a-d without CL); Type Y: DEM-less DPs (Ya-g); and Type Z: DPs containing a pronoun. An unexpected finding of this work is that, at least as far as 16th century SM is concerned, the usual assumption concerning classifiers does not hold: classifiers in the *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記 script are not mandatory when the NP is individualized and Num is occupied by a numeral.

In our exploration of the *Li<sup>4</sup> Zhi<sup>1</sup> Ji<sup>4</sup>* 荔枝記 data, we found that Pattern X2a (Dem + Num + NP) and Pattern X2b (Dem + NP), viz., the patterns free of CL, are quite robust, as shown in Table 6 in the appendix. The expression of the subjective affective meaning is an important driving force for the absence of CL. The most obviously asymmetric distribution of the demonstrative was found in Pattern Y, the barest NP. In DPs following this pattern, *tsi<sup>2</sup>* 只 and *hir<sup>2</sup>* 許 are overwhelmingly predicated by the copula *si<sup>7</sup>* 是, and always occupy the sentence-initial position. We dub such a function the ‘presentational demonstrative’, which takes on this specific property. Finally, we found two constructions in which Pattern Z, PRON + DM, is used: the possessive construction and the appositive construction, both of which permit explicit articulation. The appositive construction tends to form a vocative used in the exclamative mood and is prone to taking on an affective meaning.

Finally, in addition to the default-classifier use, we identified three other uses of “*ge<sup>5</sup>* 个” as a relativizer, nominalizer, and possessive marker, as illustrated in Table 7 in the appendix.

## REFERENCES

- Diessel, Holger. 1999. *Demonstrative: Form, Function and Grammaticalization*. Amsterdam: John Benjamins Publishing Company.
- Douglas, Rev. Carstairs. 1873. *Chinese-English Dictionary of the Vernacular or Spoken Language of Amoy with the Principal Variations of the Chang-chew and Chin-chew Dialects*. London: Trubner and Co.
- Erbaugh, Mary. 1986. Taking stock: The development of Chinese classifiers historically and in young children. *Noun Classes and Categorization*, ed. by Colette Craig, 399-436. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Guo, Xian-chen. 1987. *Xiandai Hanyu Liangci Shouce (A Handbook of Modern Chinese Classifiers)*. Beijing: Zhongguo Heping Chubanshe.
- Hsieh, Miao-Ling. 2005. Two types of modifiers and parallelisms between DPs and TPs in Chinese. *Language and Linguistics* 6.3:397-429.
- Hu, Fu. 1984. *Shuci He Liangci (Quantifiers and Classifiers)*. Shanghai: Shanghai Jiaoyu Chubanshe. (First published in 1957.)
- Huang, C.-T. James. 1982. *Logical Relations in Chinese and the Theory of Grammar*. Cambridge: MIT dissertation.
- Huang, C.-T. James, Y.-H. Audrey Li, and Yafei Li. 2009. *The Syntax of Chinese*. Cambridge: Cambridge University Press.
- Li, Y.-H. Audrey. 1985. *Abstract Case in Chinese*. Los Angeles: University of Southern California dissertation.
- Li, Y.-H. Audrey. 1998. Argument determiner and number phrases. *Linguistic Inquiry* 29:693-702.
- Li, Y.-H. Audrey. 1999. Plurality in a classifier language. *Journal of East Asian Linguistics* 8:75-99.
- Lien, Chinfa. 1994a. Synaesthetic words in the southern Min dialects: Their structure and change. *Symposium Series of the Institute of History and Philology, Academia Sinica*, Number 2. *Chinese Languages and Linguistics II. Historical Linguistics*, ed. by Jen-kuei Li, Chu-ren Huang & Chih-chen Jane Tang, 421-451. Taipei: Institute of History and Philology, Academia Sinica.
- Lien, Chinfa. 1994b. Typology and diachrony of reciprocals in Chinese dialects. *In Honor of William S-Y. Wang: Interdisciplinary Studies of Language and Language Change*, ed. by Matthew Chen & Ovid Tzeng, 281-302. Taipei: Pyramid Press.
- Lien, Chinfa (連金發). 2013. *Mingqing shiqi lijing/lizhi ji minnan fangyan zhishici de yanbian: cong zhishici dao Chengdu jiaqiangci huo pianzhang biaoji* (明清時期荔枝鏡／荔枝記閩南方言指示詞的演變：從指示詞到程度加強副詞或篇章標記). [Grammaticalization of demonstratives in Early Southern Min texts: From demonstratives to adverbs of intensification or discourse markers]. *Papers from the Fourth International Conference on Sinology: Human Language Resources and Linguistic Typology*, ed. by Chiu-yu Tseng (鄭秋豫), 129-150. Taipei: Academia Sinica.

- Lin, Jo-Wang. 1997. Noun phrase structure in Mandarin Chinese: DP or NP? *Chinese Language and Linguistics III: Morphology and Lexicon*, ed. by Feng-fu Tsao & Samuel H. Wang, 401-34. Taipei: Academia Sinica.
- Loke, Kit-Ken. 1983. A Psycholinguistic Study of Shape Features in Chinese (Mandarin and Cantonese) Sortal Classifiers. UK: University of York dissertation.
- Loke, Kit-Ken. 1994. Is *ge* merely a 'general classifier?' *Journal of the Chinese Language Teachers' Association* 24:35-50.
- Simpson, Andrew. 2001. Definiteness agreement and the Chinese DP. *Language and Linguistics* 2.1:125-156.
- Simpson, Andrew. 1997. On the status of modifying *de* in the Chinese DP. *On the Formal Way to Chinese Languages*, ed. by Sze-Wing Tang & Chen-Sheng Liu, 74-101. Stanford: CSLI.
- Tai, Hao-Yi James, and Lianqing Wang. 1990. A semantic study of the classifier *tiao*. *Journal of the Chinese Language Teachers' Association* 25:35-56.
- Tang, Chih-Chen Jane. 2005. Nouns or Classifiers: A Non-movement Analysis of Classifiers in Chinese. *Language and Linguistics* 6.3:431-472.
- Tang, Chih-Chen Jane. 2005c. Modifier Licensing and the Chinese DP: A Feature Analysis. Paper submitted to *Language and Linguistics* and talk given at the Graduate Institute of Linguistics, Tsing Hua University.
- Tang, Chih-Chen Jane. 1990. Chinese Phrase Structure and the Extended X-bar Theory. Ithaca: Cornell University dissertation.
- Tang, Chih-Chen Jane. 1993. Chinese *de* and English's. *Bulletin of the Institute History and Philology* 63.4:733-757.
- Wu, Shouli. 2001a. *Ming Jiajing Kan Li Jing Ji Xiwen Jiaoli (Annotated Texts of the Romance of Li Jing Ji in Ming Jiajing Edition (JJ))*. Taipei: Ts'ung-I Workshop.
- Wu, Shouli. 2001b. *Ming Wanli Kan Li Zhi Ji Xiwen Jiaoli (Annotated Texts of the Romance of Li Zhi Ji in Ming Wanli Edition (WL))*. Taipei: Ts'ung-I Workshop.
- Wu, Shouli. 2001c. *Qing Shunzhi Kan Li Zhi Ji Xiwen Jiaoli (Annotated Texts of the Romance of Li Zhi Ji in Qing Shunzhi Edition (SZ))*. Taipei: Ts'ung-I Workshop.
- Wu, Shouli. 2001d. *Qing Guangxu Kan Li Zhi Ji Xiwen Jiaoli (Annotated Texts of the Romance of Li Zhi Ji in Qing Guangxu Edition (GX))*. Taipei: Ts'ung-I Workshop.

[Received 29 August 2013; revised 20 February 2014; accepted 23 March 2014]

*Liching Livy Chiu and Chinfa Lien*

*Liching Livy Chiu*  
*Research Institute for the Humanities and Social Science*  
*Ministry of Science and Technology*  
*Taipei, Taiwan 100, ROC*  
*lichingchiu@ntu.edu.tw*

*Chinfa Lien*  
*Graduate Institute of Linguistics*  
*National Tsing Hua University*  
*Hsinchu, Taiwan 300, ROC*  
*cflien@gmail.com*

## APPENDIX

Table 6.

Type				Example
DEM	Num	CL	N	Tsi <sup>2</sup> tsit <sup>8</sup> kan <sup>2</sup> kann <sup>2</sup> si <sup>7</sup> iah <sup>4</sup> -tshun 只一个簡子是益春 (萬曆 38.045) this one CL bonds-maid is Yah-chun (The maid is Yah-chun)
DEM	Num	*	N	Tsi <sup>2</sup> tsit <sup>8</sup> tai <sup>7</sup> -tsi <sup>3</sup> thang <sup>1</sup> uan <sup>3</sup> tsui <sup>7</sup> -lang <sup>5</sup> 只一大志通怨誰人 (萬曆 39.044) this one matter may blame who.person 'Who can you blame for it (this matter)?'
DEM	*	CL	N	Na <sup>7</sup> hing <sup>5</sup> sing <sup>5</sup> -tsiu <sup>7</sup> tsi <sup>2</sup> tuann <sup>7</sup> tshin <sup>1</sup> 若還成就只段親 (萬曆 08.021) if still accomplish this section relation 'If the relation can still be secured.'
DEM	*	*	N	Tsi <sup>2</sup> tai <sup>7</sup> -tsi <sup>3</sup> na <sup>7</sup> uan <sup>3</sup> lim <sup>5</sup> tua <sup>7</sup> -phinn <sup>7</sup> 只大志那怨林大鼻 (萬曆 40.109) this matter if blame Lin big nose 'We blame Lin for this matter.'
DEM	Num	CL	*	Liah <sup>8</sup> tsi <sup>2</sup> tsim <sup>1</sup> -suann <sup>3</sup> pang <sup>3</sup> tsi <sup>2</sup> tsit <sup>8</sup> pinn <sup>1</sup> 掠只針線放下只一邊 (萬曆 24.055) take this needle cord put down this one side 'Put the needlework on this side.'
DEM	*	CL	*	Kio <sup>3</sup> tsue <sup>3</sup> tsioh <sup>8</sup> -kap <sup>4</sup> -ge <sup>5</sup> tsiu <sup>7</sup> si <sup>7</sup> tsi <sup>2</sup> ge <sup>5</sup> 叫做石蛤个,就是只个 (萬曆 44.138) call as stone frog-CL exactly is this CL 'This is what is called <i>tsioh-kap-ge</i> (frog).'
DEM	*	*	*	A <sup>1</sup> -niu <sup>5</sup> tsi <sup>2</sup> si <sup>7</sup> thien <sup>1</sup> -sing <sup>1</sup> in <sup>1</sup> -ien <sup>5</sup> 阿娘,只是天生姻緣 (萬曆 10.118) PFX lady this is heaven.born congrual.relation

				‘This is a predestined match, lady.’
*	<b>Num</b>	<b>CL</b>	<b>N</b>	Tan <sup>5</sup> -sann <sup>1</sup> si <sup>7</sup> tsit <sup>7</sup> ge <sup>5</sup> koo <sup>1</sup> -kheh <sup>4</sup> tshien <sup>1</sup> -hiunn <sup>1</sup> ban <sup>7</sup> -li <sup>2</sup> bo <sup>5</sup> tshin <sup>1</sup> 陳三是一个孤客,千鄉萬里無親 (萬曆 21.012) Chen-san is one CL lonely guest thousand village ten.thousand li not.have relatives ‘Chen San is a loner, and has no relatives far and wide.’
*	<b>Num</b>	*	<b>N</b>	Sio <sup>2</sup> -ber <sup>7</sup> lin <sup>2</sup> hiann <sup>1</sup> serh <sup>4</sup> tsit <sup>8</sup> kho <sup>2</sup> lang <sup>5</sup> li <sup>2</sup> thiann <sup>1</sup> 小妹,恁兄說一古人你听 (萬曆 21.087) younger.sister you(PL) older brother say one ancient.man you listen ‘Let me (your brother) tell you something about an ancient man, Sis.’
*	*	*	<b>N</b>	In <sup>1</sup> ng <sup>5</sup> goo <sup>7</sup> -niu <sup>5</sup> tan <sup>3</sup> loh <sup>7</sup> juer <sup>7</sup> -tsi <sup>1</sup> 因黃五娘擲落荔枝 (萬曆 00.007) because Huang five lady throw fall litchi ‘Because Huang, the fifth lady, tossed the litchi twigs.’
*	<b>Num</b>	<b>CL</b>	*	Li <sup>2</sup> po <sup>5</sup> gun <sup>2</sup> -tshu <sup>3</sup> tir <sup>1</sup> -bu <sup>2</sup> sinn <sup>1</sup> ni <sup>5</sup> tshit <sup>4</sup> pueh <sup>4</sup> ge <sup>5</sup> ti <sup>7</sup> te <sup>3</sup> 李婆,阮厝豬母生年七八个在處 (萬曆 25.043 ) Li woman we (EXCL) house pig.female give.birth PARTICLE seven eight CL CONTINUATIVE ASPECT ‘Our pig gave birth to seven or eight piglets, Aunt Li.’

Table 7.

Type	Examples	Version	Source	Usage
I.	I <sup>1</sup> tsir <sup>2</sup> tsuinn si lan <sup>2</sup> tshi <sup>17</sup> ge <sup>5</sup> 伊自前是赧厝飼个 he formerly is our house raise REL 'He used to be the one that we raised'	WL	24.148	Relativizer
II.	Lau <sup>7</sup> ge <sup>5</sup> tsiu <sup>2</sup> ti <sup>7</sup> tsi <sup>5</sup> 老个,酒在只 old NM wine at here 'Honey, the wine is here'	WL	12.042	nomalizer
III.	Hir <sup>2</sup> si <sup>7</sup> au <sup>7</sup> kau <sup>1</sup> ng <sup>5</sup> tshu <sup>0</sup> ng <sup>5</sup> kiu <sup>2</sup> long <sup>5</sup> kong <sup>1</sup> ge <sup>5</sup> 許是後溝黃厝黃九郎公个 that is rear ditch Huang house Huang No 9 PM 'That is the one belonging to Mr Huang No 9 at the Huangs of rear ditch'	WL	16.010	possessive marker

漢語荔枝記(萬曆本荔鏡記)中的名詞組結構

邱力環<sup>1</sup> 連金發<sup>2</sup>

科技部人文與社會科學研究中心<sup>1</sup>

國立清華大學<sup>2</sup>

荔鏡記(*Li4 Jing4 Ji4*)乃是閩南語最早的戲曲口語文本。本文採用荔枝記 *Li4 Zhi1 Ji4* (萬曆版本)語料庫的語料,探討名詞以及指示詞組(DPs)的結構。漢語指示詞組內部的功能詞豐富,包括:指示詞(DEM)、數詞(Num)、量詞(CL),名詞組也可以是光桿名詞(NP)。首先,我們根據功能詞的有無歸納了三類共存組合,分別為:(a) X1類 ([+DEM][+CL]) (b) X2類 ([+DEM][-CL]), (c) Y類 ([-DEM])來作量化分析。我們也發現指示詞組的某些與現代漢語不同的特殊格式,例如:「指示詞+名詞」以及「數詞+名詞」都是出現在荔枝記的格式,而在可能的格式當中,也顯示與漢語不盡相同的結構分析。

關鍵字:指示詞組、量詞、名詞組、閩南語