

Reflections on the Morphological Nature of Mandarin Functional Homophones *-de*

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Introduction

There are several homophonic grammatical morphemes in Mandarin¹ sharing the form *-de* [d̥ə] represented by the characters 的,² 底,² 地 and 得 respectively. These homophones can be quite easily divided into two distinct groups: one group including those written as 的, 底, 地, and the other consisting of those written as 得.³ The present study deals only with the former. For the sake of simplicity, we can call them ‘phonological morphemes’ in analogy to the phonological word, putting aside the purely theoretical question whether they

- 1 Unless otherwise specified, in the present article the term ‘Mandarin’ shall be used in the sense of ‘Modern Standard Mandarin’ (MSM) as a generic term including both the ‘common speech’ (*pǔtōnghuà* 普通話), the official language of the PRC, and the ‘national language’ (*guóyǔ* 國語), the official language of the ROC; most examples in this study are taken from PRC sources, though. I use the adjective ‘Chinese’ only when speaking about the country or the people but I refrain from using it (unless in quotations) when referring to the languages spoken by ethnic Chinese (*Hànzú* 漢族) and their predecessors because of the ambiguity of the term and because I do not regard ‘Chinese’ as a single language but rather a group of related languages. Therefore I use the term ‘Sinitic’ to designate the whole group and ‘Mandarin’ (in a broader sense) to refer to one language (or dialect continuum) of this group.
- 2 This character was used to represent *-de* in the 1920s and 1930s (and it had a similar function in as early as the 9th century, i.e. in the period of Late Middle Sinitic) but it is not commonly used this way anymore.
- 3 For details, see Zhū Déxī 朱德熙, »Shuō *-de*« 說 “的” [On *-de*, 1961], in *Zhū Déxī wénjí* 朱德熙文集 [Collected Works of Zhū Déxī], 5 vols. (Běijīng: Shāngwù yīnshūguǎn, 1999), 2: 95–96.

are homonyms or constitute a polyseme instead. The phonological morpheme *-de* represented by the character 的 is, regardless of the language register or style, by far the most frequent one⁴ in Mandarin. It has been of increased interest to scholars in the field of Sinitic linguistics since the 1950s when first specialized articles on this subject appeared in China. In the period from the 1960s up to the early 1990s, the many functions of *-de* were described by the well-known linguist Zhū Déxī 朱德熙 (1920–1992). In recent years the research continues predominantly in the generative framework and it is no more limited to the pages of China's domestic linguistic journals.

Although a considerable amount of literature has been published on *-de* with more than 300 articles in China alone,⁵ far too little attention has been paid to its morphological nature. Based on Zhū Déxī's research, this study argues that all three morphemes represented by *-de*, i.e. *-de*₁, *-de*₂ and *-de*₃, are affixes with morphological, not syntactic functions. That is to say they are used to mark neither phrases nor clauses, but words.

The present paper has been divided into three parts. The first part summarizes the language structures in which *-de* occurs, the second part gives a brief overview of the linguistic discourse concerning *-de* while the third part deals with the morphological nature of *-de* and of the so-called '*-de* structures'.

Abbreviations and Symbols

The following abbreviations are used in the present study: A—attributive, ABS—absolute, ACC—accusative, ACT—active, Adj—adjective, Adj_{NonP}—non-predicative adjective, Adv—adverb, Adv_{ComSup}—adverb expressing the comparative or superlative degree, Adv_{Deg}—adverb of degree, AM—adverbial modifier, C—complement, Cla—classifier,⁶ F—feminine, FE—fixed expression, IND—indicative, INF—infinitive, LOC—locative, M—masculine, MOD—modality, N—noun, N_{Loc}—noun of locality, NEG—

4 Cf. *Xiàndài Hànyǔ pīnlǜ cídiǎn* 現代漢語頻率詞典 [Modern Chinese Frequency Dictionary, 1986] (Běijīng: Běijīng yǔyán xuéyuàn chūbǎnshè, 1990), 492, 658, 962, 1042, 1122, 1202. The ambiguous term *xiàndài Hànyǔ* 現代漢語 ('Modern Chinese') corresponds here to my 'Modern Standard Mandarin' and not to 'Modern Sinitic'.

5 See p. 1 of Fàn Xiǎo's 范晓 Preface to Xú Yángchūn 徐陽春, *Xūcí »de« jíqí xiāngguān wèntí yánjiū* 虛詞“的”及其相關問題研究 [A Study on the Form Word »De« and its Related Matters *[sic]*] (Běijīng: Wénhuà yìshù chūbǎnshè; Zhōngguó shèhuì kēxué chūbǎnshè, 2006).

6 I divide what is usually labelled as 'classifiers' or 'measure words' (*liàngcí* 量詞) in Sinitic grammar into two categories, 'classifiers' (e.g. *běn* 本, *zhāng* 張, *tiáo* 條 etc.) and 'quantifiers' (e.g. *jīn* 斤, *mǐ* 米, *bēi* 杯 etc.).

negative, NP—nominal phrase, Num—numeral, O—object, Ono—onomatopoeia, P—predicate, PAST—past tense, PRES—present tense, Pro—pronoun, Pro_{Dem}—demonstrative pronoun/adjective, Pro_{Loc}—pronoun of locality, PROG—progressive aspect, Qua—quantifier, S—subject, SG—singular, V—verb, Vo—verb with an incorporated object, VP—verbal phrase.

Structural patterns are given in curly brackets {x} with upper-case letters denoting roots and lower-case letters denoting affixes. Additional distinctions are provided in the form of lower indices after the curly brackets. Syntactic functions of *X-de* are given in square brackets [x] and parts of speech of the heads in attributive constructions are in angle brackets <x>. The hyphen (-) is used to connect an affix with its root, while the equals sign (=) connects a clitic with its host (these symbols are applied only in language examples). The so-called ‘erization’ (*érhuà* 兒化), which often remains unmarked in original Mandarin texts outside textbooks, is marked by a lower-index simplified character _(L). The upper-index letter ^(U) marks ungrammatical structures, the upper-index letter ^(I) marks children’s speech and the upper-index letter ^(R) marks structures that have little or no currency in the spoken language (although they may be common in the written vernacular *báihuàwén* 白話文) and can be considered somewhat artificial, due to either Classical Sinitic (*wényánwén* 文言文) or Western influence.

1 Classification of *X-de*

I use Zhū Déxī’s formula ‘*X-de*’ for all kinds of language structures containing a phonological morpheme *-de*.⁷ All these constructions (known as *-de zì jiégòu* “的”字結構 ‘*-de* structures’ in Mandarin) can be classified according to two basic criteria: (a) syntactic function and (b) internal composition.

When classifying according to the syntactic function, the main dividing line lies between modifying and non-modifying functions. Modifying functions include the attributive and the adverbial modifier while non-modifying functions include the subject, the predicate and the object. The complement (*bǔyǔ* 補語),⁸ although logically having a modifying function, should be classified separately because its relation to the head is expressed anaphorically in contrast to the other modifiers.

7 Zhū Déxī, »Shuō *-de*«, 96–97.

8 I mean the so-called ‘complement of degree’ (*chéngdù bǔyǔ* 程度補語). I do not analyse most of other traditional ‘complements’ such as the ‘resultative complement’ (*jiéguǒ bǔyǔ* 結果補語), the ‘directional complement’ (*qūxiàng bǔyǔ* 趨向補語) or the ‘potential complement’ (*kěnéng bǔyǔ* 可能補語) as complements but rather as integral parts of the verb.

The classification according to the composition of the structure can be based primarily on the nature of X and in attributive constructions also on the part-of-speech membership of the head. In this way, constructions with adjectival, adverbial, nominal (including pronouns and numerals), onomatopoeic, verbal and phrasal modifiers that can modify nouns, pronouns, numerals, adjectives and verbs can be distinguished.

I have first divided all X-*de* on the basis of the nature (part of speech) of X into six main categories. Most categories have been further subdivided according to more subtle inner differences. Examples within each (sub)category are arranged according to the syntactic functions of X-*de* and attributives also according to the part of speech of the modified.

Sources of Mandarin examples: the language of everyday conversation, Chinese internet, data from the Center for Chinese Linguistics Corpus (these are marked as ‘CCL’),⁹ examples often used in various studies on *-de*, *A Grammar of Spoken Chinese* by Yuen Ren Chao¹⁰ and *Collected Works of Wáng Shuò*.¹¹ All examples have been verified by a native speaker of Mandarin.

1.1 *Adjectives*

1.1.1 Base Forms¹²

1.1.1.1 Adj {A}: [A] <N> *xīn-de shū* 新的書 ‘new books’, <Pro> *hǎo-de nǐ* 好的你 ‘good you’, <Num/Pro_{Dem}Cla> 〇 <Adj> 〇, <V> 〇, [AM] 〇, [C] 〇, [S/O] *xīn-de hǎo* 新的好 ‘the new one is better’, *wǒ yào xīn-de* 我要新的 ‘I want a new one’, [P] *zhèběn shū shì xīn-de* 這本書是新的 ‘this book is new’.

9 CCL Yǔliàokù 語料庫 [CCL Corpus], Peking University, <ccl.pku.edu.cn:8080/ccl_corpus/>.

10 Yuen Ren Chao, *A Grammar of Spoken Chinese* (Berkeley, Los Angeles: University of California Press, 1968).

11 *Wáng Shuò wénjí* 王朔文集 [Collected Works of Wáng Shuò], 4 vols (Běijīng: Huáyì chūbǎnshè, 1996).

12 For details on ‘base forms’ and ‘complex forms’ of adjectives see Zhū Déxī, »Xiàndài Hànyǔ xíngróngcí yánjiū« 現代漢語形容詞研究 [A Study of Adjectives in Modern Chinese; 1956], in *Zhū Déxī wénjí*, 2: 1–37; and Waltraud Paul, »Zhū Déxī’s Two Classes of Adjectives Revisited«, in *Studies in Chinese Language and Culture—Festschrift in Honour of Christoph Harbsmeier on the Occasion of his 60th Birthday*, ed. by C. Anderl and H. Eifring (Oslo: Hermes Academic Publishing, 2006), 303–315.

1.1.1.2 Adj {AB}_A: [A] <N> *gānjìng-de yīfu* 乾淨的衣服 ‘clean clothes’, <Pro> *gānjìng-de tā* 乾淨的她 ‘she who is clean’, <Num/Pro_{Dem}Cla> *gānjìng-de nèitiáo* 乾淨的那條 ‘that clean one’, <Adj> 〇, <V> 〇, [AM] 〇, [C] 〇, [S/O] *gānjìng-de zài zhèr* 乾淨的在這兒 ‘the clean one is here’, *wǒ yào gānjìng-de* 我要乾淨的 ‘I want the clean one’, [P] *zhèige pán-zi shì gānjìng-de* 這個盤子是乾淨的 ‘this plate is clean’.

1.1.1.3 Adj {AB}_B: [A] <N> *dàdǎn-de rén* 大膽的人 ‘bold people’, <Pro> ^R*dàdǎn-de nǐ* 大膽的你 ‘bold you’, <Num/Pro_{Dem}Cla> *dàdǎn-de nàwèi* 大膽的那位 ‘that bold one’, <Adj> 〇, <V> 〇, [AM] *dàdǎn-de xiǎng* 大膽地想 ‘to think boldly’ [C] 〇, [S/O] *dàdǎn-de yě bùshǎo* 大膽的也不少 ‘there are quite a few bold ones’, *wǒ xūyào dàdǎn-de* 我需要大膽的 ‘I need bold ones’, [P] *zhège rén shì rèxīn-de* 這個人是熱心的 ‘this person is enthusiastic’.¹³

1.1.1.4 Adj {A, AB}_{NonP}: [A] <N> *fāng-de zhuō-zi* 方的桌子 ‘a square table’, *gòngtóng-de lìyì* 共同的利益 ‘common interest’, <Pro> ^R*yuánlái-de wǒ* 原來的我 ‘original me’, <Num/Pro_{Dem}Cla> *yuán-de nèizhāng* 圓的那張 ‘that round one’, *gòngtóng-de yītiáo* 共同的一條 ‘the one in common’, *yuánlái-de zhèizhāng* 原來的這張 ‘this original one’, <Adj> 〇, <V> 〇, [AM] 〇, [C] 〇, [S/O] *fāng-de hǎo* 方的好 ‘the square one is better’, *gòngtóng-de hǎo* 共同的好 ‘the common one is better’, *wǒ yào fāng-de* 我要方的 ‘I want a square one’, *wǒ yào yuánlái-de* 我要原來的 ‘I want the original one’, [P] *zhèizhāng zhuō-zi shì fāng-de* 這張桌子是方的 ‘this table is square’, *lìyì shì gòngtóng-de* 利益是共同的 (CLC) ‘the interest is common’, *jiājū shì yuánlái-de* 家具是原來的 ‘the furniture is original’.¹⁴

1.1.1.5 Adv_{ComSup}-Adj: [A] <N> *gèngbǎo-de rén* 更好的人 ‘a better man’, *zuìbǎo-de dōngxi* 最好的東西 ‘the best thing’, <Pro> 〇, <Num/Pro_{Dem}Cla> 〇, <Adj> 〇, <V> 〇, [AM] *gèngbǎo-de chǔlǐ* 更好地處理 ‘deal with (something) better’, [C] 〇, [S/O] *gèngbǎo-de zài zhèr* 更好的在這兒 ‘the better one is here’, *wǒ yào zuìbǎo-de* 我要最好的 ‘I want the best one’, [P] *zhèzhǒng (shì) zuìbǎo-de* 這種(是)最好的 ‘this kind is the best’.

13 The majority of adjectives of this category cannot take the suffix *-de* in predicative position: the native speaker would only say e.g. *zhè bǎizi hěndàdǎn* 這孩子很大膽 (or even better *zhè bǎizi dǎnzi dà* 這孩子膽子大) but not *zhè bǎizi (shì) dàdǎn-de* 這孩子(是)大膽的 ‘the child is bold’ etc.

14 Cf. Waltraud Paul, »Adjectives in Mandarin Chinese«, in *Adjectives: Formal Analyses in Syntax and Semantics*, ed. by Patricia Cabredo Hofherr and Ora Matushansky (Amsterdam; Philadelphia: John Benjamins, 2010), 118–119. My examples invalidate Paul’s argument that non-intersective adjectives in Mandarin, e.g. *gòngtóng* 共同 ‘common’ or *yuánlái* 原來 ‘original’, »are completely excluded from the predicative function, irrespective of *shì...de*« (118).

1.1.2 Complex Forms

1.1.2.1 Adj {AA}: [A] <N> *lǜlǜ-de cǎo* 綠綠的草 ‘green grass’, *hǎohǎo-de dōngxi* 好好_儿的東西 ‘good things’ <Pro> ^R*shǎshǎ-de tā* 傻傻的他 ‘stupid he’, *hǎohǎo-de nǐ* 好好_儿的你 ‘good you’ <Num/Pro_{Dem}Cla> *hǎohǎo-de yige* 好好_儿的一個 ‘a good one’, *hǎohǎo-de zhèzhī* 好好_儿的這支 ‘this good one’ <Adj> o, <V> o, [AM] *shǎshǎ-de kànzhe* 傻傻地看着 ‘to watch stupidly’, *hǎohǎo-de xuéxi* 好好_儿地學習 ‘to study well’, [C] *yǎng-de féifēi-de* 養得肥肥的 ‘to fatten up’, [S/O] ¹*báibái-de hǎo* 白白的好 ‘the white one is better’, ¹*wǒ yào dàdà-de* 我要大大的 ‘I want a big one’, [P] ¹*zhèzhāng zhǐ (shì) báibái-de* 這張紙 (是) 白白的 ‘this sheet of paper is white’, *zhè dōngxi (shì) hǎohǎo-de* 這東西 (是) 好好_儿的 ‘this thing is good’.

1.1.2.2 Adj {AABB, A-li-AB}: [A] <N> *gāogāoxìngxìng-de rén* 高高興興的人 ‘happy people’, *hú-li-hútu-de jiàoshòu* 糊裡糊塗的教授 ‘a muddleheaded professor’ <Pro> ^R*gāogāoxìngxìng-de wǒ* 高高興興的我 ‘happy I’, ^R*hú-li-hútu-de tā* 糊裡糊塗的他 ‘muddleheaded he’, <Num/Pro_{Dem}Cla> o, <Adj> o, <V> o, [AM] *gāogāoxìngxìng-de wánr* 高高興興地玩_儿 ‘to play jouyfully’, *hú-li-hútu-de hùn rì-zǐ* 糊裡糊塗地混日子 ‘to muddle along’, [C] *wánr-de gāogāoxìngxìng-de* 玩_儿得高高興興的 ‘to play jouyfully’, *gǎo-de hú-li-hútu-de* 搞得糊裡糊塗的 ‘to make a muddle’ [S/O] *gāogāoxìngxìng-de duō hǎo* 高高興興的多好 ‘how good it is to be happy’, *wǒ búyào hú-li-hútu-de* 我不要糊裡糊塗的 ‘I don’t want muddleheaded ones’, [P] *zhè xiǎoháir (shì) gāogāoxìngxìng-de* 這小孩_儿 (是) 高高興興的 ‘this child is happy’, *tā zhèngtiān (shì) hú-li-hútu-de* 他整天 (是) 糊裡糊塗的 ‘he is confused all day long’ (NB: the variant without *shì* 是 is considered better by the native speaker).

1.1.2.3 Adj {A-bb, A-bcd, AB-cc}: [A] <N> *pàng-hūhū-de xióngmāo* 胖乎乎的熊貓 ‘fat pandas’, *zāng-lebājī-de liǎndàn* 髒了吧唧的臉蛋_儿 ‘a dirty face’, *kělián-xīxī-de yàngzi* 可憐兮兮的樣子 ‘a pitiful appearance’, <Pro> ^R*pàng-hūhū-de wǒ* 胖乎乎的我 ‘fat me’, ^R*zāng-lebājī-de tā* 髒了吧唧的他 ‘dirty he’, ^R*kělián-xīxī-de nǐ* 可憐兮兮的你 ‘poor you’, <Num/Pro_{Dem}Cla> *pàng-hūhū-de yīzhī* 胖乎乎的一只 ‘a fat one’, *zāng-lebājī-de zhètiáo* 髒了吧唧的這條 ‘dirty this one’, *kělián-xīxī-de nàwèi* 可憐兮兮的那位 ‘pitiful that one’, <Adj> o, <V> o, [AM] *màn-yōuyōu-de zǒu* 慢悠悠地走 ‘to walk unhurriedly’, *kělián-xīxī-de kànzhe wǒ* 可憐兮兮地看着我 ‘looking at me pitifully’, [C] *zǒu-de màn-yōuyōu-de* 走得慢悠悠的 ‘to walk unhurriedly’, *nòng-de zāng-lebājī-de* 弄得髒了吧唧的 ‘to make dirty’, *xiǎn-de kělián-xīxī-de* 顯得可憐兮兮的 ‘to seem pitiful’, [S/O] *pàng-hūhū-de hǎokàn* 胖乎乎的好看 ‘a fat one is nicer’, *bù-yào zāng-lebājī-de* 不要髒了吧唧的 ‘I don’t want a dirty one’, [P] *wū-li (shì) hēi-hūhū-de* 屋裡 (是) 黑乎乎的 ‘it is dark in the room’ (NB: the variant without *shì* 是 is considered better by the native speaker).

speaker), *zhèixie yīfu (shì) zāng-lebāji-de* 這些衣服 (是) 髒了吧唧的 ‘these clothes are dirty’, *zhè hái-zi (shì) kělián-xīxī-de* 這孩子 (是) 可憐兮兮的 ‘this child is pitiable’ (NB: the variant without *shì* 是 is considered better by the native speaker).

1.1.2.4 Adj {AB}_{NA}Adj: [A] <N> *bīngliáng-de shuǐ* 冰涼的水 ‘ice-cold water’, <Pro> ^R*bīngliáng-de tā* 冰涼的他 ‘ice-cold she’, <Num/Pro_{Dem}Cla> *bīngliáng-de zhèige* 冰涼的這個 ‘ice-cold this one’, <Adj> o, <V> o, [AM] o, [C] o, [S/O] *bīngliáng-de hǎo* 冰涼的好 ‘the ice-cold one is better’, *wǒ yào bīngliáng-de* 我要冰涼的 ‘I want an ice-cold one’, [P] *tā-de shǒu (shì) bīngliáng-de* 他的手 (是) 冰涼的 ‘his hands are ice-cold’.

1.1.2.5 Adv_{Deg}-Adj: [A] <N> *hěnhǎo-de rén* 很好的人 ‘a very good man’, *fēichángpiányi-de dōngxi* 非常便宜的東西 ‘extremely cheap things’, <Pro> *tǐnghǎowánr-de tā* 挺好玩兒的他 ‘quite funny he’, <Num/Pro_{Dem}Cla> *fēichánghǎo-de yige* 非常好的一個 ‘an extremely good one’, <Adj> o, <V> o, [AM] *hěnhǎo-de wánchéng rènwù* 很好地完成任務 ‘to accomplish the task (very) well’, *fēichángpiányi-de màidiào* 非常便宜地賣掉 ‘to sell off extremely cheaply’, [C] *mài-de hěnpíányi-de* 賣得很便宜的 ‘to sell cheaply’, *jiěshì-de fēichánghǎo-de* 解釋得非常好的 ‘to explain extremely well’, [S/O] *hěnpíányi-de bùhǎo* 很便宜的不好 ‘very cheap ones are not good’, *wǒ yào hěnpíányi-de* 我要很便宜的 ‘I want a very cheap one’, [P] *xióngmāo (shì) tǐnghǎowánr-de* 熊貓 (是) 挺好玩兒的 ‘pandas are quite funny’.

1.2 Adverbs

1.2.1 Adv {AB}: [A] <N> o, <Pro> o, <Num/Pro_{Dem}Cla> o, <Adj> o, <V> o, [AM] *fēicháng-de tòngkuài* 非常地痛快 ‘extremely delighted’, [C] o, [S/O] o [P] o.

1.3 Nominals

1.3.1 N/Pro: [A] <N> *péngyǒu-de chē* 朋友的車 ‘a friend’s car’, *wǒ-de shū* 我的書 ‘my book’, <Pro> *wèilái-de wǒ* 未來的我 ‘me in the future’, <Num/Pro_{Dem}Cla> *wǒ-de zhèběn* 我的這本 ‘this (book, magazine etc.) of mine’, <Adj> ^R*Měiguó-de qiángdà* 美國的強大 ‘the USA’s (being) strong’, ^R*wǒ-de qióng* 我的窮 ‘my (being) poor’,¹⁵ <V> ^R*Hànyǔ-de xuéxí* 漢語的學習 ‘the learning of the

15 *Wǒ-de qióng shì rénrén zhīdào-de*. 我的窮是人人知道的 ‘My (being) poor is what everyone knows.’ (Chao, *A Grammar of Spoken Chinese*, 292).

Chinese language’, ¹⁶ *tā-de bù-dǒng* 他的不懂 ‘his not understanding’, ¹⁶ *tā-de shuōbuǎng* 他的說謊 ‘his lying’, ¹⁷ [AM] o, [C] o, [S/O] *bàba-de shì jiù-de* 爸爸的是舊的 ‘Daddy’s one is old’, *tāmen bùyào nǐ-de* 他們不要你的 ‘they don’t want yours/you’, ¹⁸ [P] *zhèliàng chē shì péngyou-de* 這輛車是朋友的 ‘this car is (my) friend’s’, *nàběn shū shì wǒ-de* 那本書是我的 ‘that book is mine’.

1.3.2 N/Pro_{Loc}: ¹⁹ [A] <N> *jǐng-lǐ-de shuǐ* 井裡的水 ‘water in the well’, *zhè-lǐ-de dōngxi* 這裡的東西 ‘the things here’, <Pro> ¹⁹ *jìng-zì-lǐ-de zìjǐ* 鏡子裡的自己 ‘himself in the mirror’, ²⁰ <Num/Pro_{Dem}Cla> *zhuō-zì-shàng-de nàizhāng* 桌子上的那張 ‘that one on the table’, *zhè-lǐ-de zhèige* 這裡的這個 ‘this one here’, <Adj> o, <V> o, [AM] o, [C] o, [S/O] *wài-tou-de bù-hǎo* 外頭的不好 ‘the outer one is not good’, *wǒ yào zhè-lǐ-de* 我要這裡的 ‘I want this one here’, [P] *nǐ shì nǎ-lǐ-de?* 你是哪裡的? ‘where are you from?’, *wǒ shì Běijīng-de* 我是北京的 ‘I am from Peking’.

1.3.3 NumQua: [A] <N> *liǎngbàng-de ròu* 兩磅的肉 ‘two pounds of meat’, ²¹ *yīdì-de shuǐ* 一地的水 ‘a floorful of water’ ²² <Pro> ²¹ *shísuì-de wǒ* 十歲的我 ‘ten-year-old me’, <Num/Pro_{Dem}Cla> *sānjīn-de zhèige* 三斤的這個 ‘this three-jīn one’, <Adj> o, <V> o, [AM] o, [C] o, [S/O] *liǎngmǐ-de tài-cháng-la* 兩米的太長啦 ‘the two-metre one is too long’, *wǒ yào yītiān-de* 我要一天的 ‘I want a daily one’, [P] *zhè shì wǔmǐ-de* 這是五米的 ‘this is a five-metre one’.

16 *Nǐ xìn tā-de bùdǒng!* 你信他的不懂! ‘(Don’t) you believe his not understanding (you)!’ (Chao, *A Grammar of Spoken Chinese*, 292).

17 *Tā-de shuōbuǎng shì ge xíguàn.* 他的說謊是個習慣。 ‘His lying is a habit.’ (Chao, *A Grammar of Spoken Chinese*, 292).

18 As *-de* may refer to either the object or the verb here, this example is ambiguous and can be also included under 1.5.3.1 below.

19 I have separated the nominals of locality for the sake of comparative studies because some of these nominals behave differently in certain Sinitic languages, see Wǔ Yúnjī 伍云姬, *A Synchronic and Diachronic Study of the Grammar of the Chinese Xiang Dialects* (Berlin; New York: Mouton de Gruyter, 2005), 288.

20 *Wáng Shuò wénjǐ*, 4: 1.

21 Chao, *A Grammar of Spoken Chinese*, 290.

22 *Ibid.*, 290.

1.4 *Onomatopoeia*

1.4.1 Ono {AA, AB, ABB}: [A] <N> *hūhū-de běifēng* 呼呼的北風²³ ‘whistling north wind’, *dīngdāng-de língshēng* 叮噹的鈴聲 ‘the bell sound of ding-dong’, *buālālā-de shuǐshēng* 嘩啦啦的水聲 ‘the water sound of *bualala*’,²⁴ <Pro> o, <Num/Pro_{Dem}Cla> o, <Adj> o, <V> o, [AM] *hāhā-de xiào* 哈哈地笑 ‘to laugh ha-ha’, *dīngdāng-de xiǎng* 叮噹地響 ‘to sound ding-dong’, *buālālā-de liú* 嘩啦啦地流 ‘to flow *bualala*’, [C] o, [S/O] o, [P] o.

1.4.2 Ono {AABB, ABAB, ABCD}: [A] <N> *xīxihāhā-de rén* 嘻嘻哈哈的人 ‘a giggler’, *gūdugūdū-de shēngyīn* 咕嘟咕嘟的聲音 ‘a bubbling sound’, *pīlipālā-de shēngyīn* 劈里啪啦的聲音 ‘a crackling sound’, <Pro> *xīxihāhā-de tā* 嘻嘻哈哈的他 ‘laughing and joking he’ <Num/Pro_{Dem}Cla> *xīxihāhā-de zhèige* 嘻嘻哈哈的這個 ‘this laughing and joking one’, <Adj> o, <V> o, [AM] *xīxihāhā-de xiào* 嘻嘻哈哈地笑 ‘to laugh *hi-bi-ha-ha*’, *gūdōnggūdōng-de hēxiaqu* 咕咚咕咚地喝下去 ‘drink up at a few gulps’, *pīlipālā-de xiǎng* 劈里啪啦地響 ‘make crackling sounds’, [C] *xiǎng-de pīlipālā-de* 響得劈里啪啦的 ‘make crackling sounds’, [S/O] o, [P] *zhèige rén zǒngshì xīxihāhā-de* 這個人總是嘻嘻哈哈的 ‘this person always laughs and jokes’, *tā zuòshì xīlibuālā-de* 他做事儿稀里嘩啦的 ‘he does things carelessly’.

1.5 *Verbs*

1.5.1 Verbs without Expressed Object

1.5.1.1 V: [A] <N> *kàn-de rén* 看的人 ‘watching/watched people’, *zǒu-le-de rén* 走了的人 ‘people who have left’, *zǒu-guò-de lù* 走過的路 ‘a path that had been walked (before)’, <Pro> ^R*cháo wǒ wēixiào-de* [...] *tā* 朝我微笑的 [...] 她 ‘she, who was smiling at me’,²⁵ <Num/Pro_{Dem}Cla> o, <Adj> o, <V> o, [AM] o, [C] o, [S/O] *shuō-de jiù shì tā* 說的就是他 ‘it is he who is spoken about’, *wǒ méiyǒu kàn-de* 我沒有看的 ‘I haven’t got anything to read’, [P] *shū shì kàn-de* 書是看的 ‘books are for reading’, *wǒ (shì) cóng Běijīng lái-de* 我 (是) 從北京來的

23 Li Déjīn 李德津 and Chéng Měizhēn 程美珍, *Wàiguórén shíyòng Hànyǔ yǔfǎ* 外國人實用漢語語法 [A Practical Chinese Grammar for Foreigners; 1988] (Běijīng: Sinolingua, 1990), 150.

24 Zhū Déxī states in »Shuō -de« (124): »Monosyllabic, disyllabic and trisyllabic onomatopoeia can only serve as adverbial modifiers and cannot serve as predicates, complements and attributes.« As seen from these examples this is not entirely true as the aforementioned onomatopoeia can function as attributes of nouns, although they are rather limited in this usage because they mostly modify nouns with the meaning of various kinds of sounds.

25 *Wáng Shuò wénjí*, 4: 249.

'I have come from Peking', *nǐmen (shì) shénme shíhòu zǒu-de* 你們(是)甚麼時候走的? 'when did you leave?', *tā huì qù-de* 他會去的 'he will go'.

1.5.1.2 S (M) V: [A] *tā (xiànzài) kàn-de rén* 他(現在)看的人 'the people he is looking at (now)', <Pro> o, <Num/Pro_{Dem}Cla> o, <Adj> o, <V> o, [AM] o, [C] o, [S/O] *wǒ (xiànzài) kàn-de shì yīběn chángpiān xiǎoshuō* 我(現在)看的是 一本長篇小說 'what I am reading (now) is a novel', *yǒu nǐ kàn-de* 有你看的 'there are plenty for you to read', [P] *zhèběn shū shì wǒ (xiànzài) kàn-de* 這本書是我(現在)看的 'this book is what I am reading (now)'.

1.5.1.3 V {bù-A, bù-AB}: [A] <N> o, <Pro> o, <Num/Pro_{Dem}Cla> o, <Adj> o, <V> o, [AM] *bù-tíng-de shuō* 不停地說 'to talk unceasingly', [C] o, [S/O] o, [P] o.

1.5.1.4 V {AA}: [A] <N> o, <Pro> o, <Num/Pro_{Dem}Cla> o, <Adj> o, <V> o, [AM] *tōutōu(r)-de kàn* 偷偷(地)看 'to watch stealthily', [C] o, [S/O] o, o, [P] o.

1.5.2 Verbs with an Incorporated Object

1.5.2.1 V_{OA}: [A] <N> *kànshū-de hái-zi* 看書的孩子 'reading children', *kànshū-de jīhuì* 看書的機會 'a reading opportunity', <Pro> *kànshū-de wǒ* 看書的我 'reading I', <Num/Pro_{Dem}Cla> *kànshū-de nàwèi* 看書的那位 'that reading one', <Adj> o, <V> o, [AM] o, [C] o, [S/O] *hěnduō kànshū-de dōu shì xuéshēng* 很多看書的都是學生 'many of those who read are students', *yǒu jǐge kànshū-de?* 有幾個看書的? 'how many readers are there?', [P] *wǒ shì kànshū-de* 我是看書的 'I am a book reader'.

1.5.2.2 V_{OB}: [A] <N> *shēngqì-de lǎoshī* 生氣的老師 'an angry teacher', *shēngqì-de hài-chù* 生氣的害處 'the harmful effects of anger', <Pro> *shēngqì-de tā* 生氣的他 'angry he', <Num/Pro_{Dem}Cla> *shēngqì-de nàwèi* 生氣的那位 'that angry one', <Adj> o, <V> o, [AM] *shēngqì-de shuō* 生氣地說 'to say angrily', [C] o, [S/O] *shēngqì-de shì tā* 生氣的是他 'it is him who is angry', [P] *yǔdiào shì gāoxìng ér bùshì shēngqì-de* 語調是高興而不是生氣的 (CCL) '(his) intonation was happy and not angry', *wǒ bùhuì shēngqì-de* 我不會生氣的 'I won't be angry'.

1.5.2.3 S (M) V_{OA}: [A] <N> *wǒ (gāngcái) chīfàn-de pán-zi* 我(剛才)吃飯的 盤子 'the plate I have (just) eaten from', <Pro> o, <Num/Pro_{Dem} + Cla> o, <Adj> o, <V> o, [AM] o, [C] o, [S/O] *wǒ (gāngcái) chīfàn-de zài nàr* 我(剛才) 吃飯的在那兒 'the one I have (just) eaten from is over there', [P] o.

1.5.2.4 S (M) V_{OB}: [A] <N> *wǒ (zuótiān) shēngqì-de yuányīn* 我(昨天)生氣 的原因 'the reason why I was angry (yesterday)', <Pro> o, <Num/Pro_{Dem} + Cla> o, <Adj> o, <V> o, [AM] o, [C] o, [S/O] o, [P] o.

1.5.3 Verb-Object Constructions

1.5.3.1 V-O: [A] <N> *cóngshì jiàoyùgōngzuò-de rén* 從事教育工作的人 ‘people who work in education’, *yánjiū yǔyán-de mùdì* 研究語言的目的 ‘the purpose of studying language’, <Pro> *jiǎnchá gōngzuò-de tā* 檢查工作的他 ‘he who checks up on work’, <Num/Pro_{Dem}Cl> *yánjiū yǔyán-de nàwèi* 研究語言的那位 ‘that one who is engaged in language research’, <Adj> o, <V> o, [AM] o, [C] o, [S/O] *gěi=ta zhèige dōngxī-de shì wǒ* 給他這個東西的是我 ‘it is me who gave him this thing’, [P] *wǒ (shì) zuótiān gěi=ta nàbǐ qián-de* 我(是)昨天給他那筆錢的 ‘I gave him the money yesterday’.

1.5.3.2 S (M) V-O: [A] <N> *rénmen (guòqù) yánjiū yǔyán-de mùdì* 人們(過去)研究語言的目的 ‘the purpose why people studied language (in the past)’, <Pro> o, <Num/Pro_{Dem}Cl> o, <Adj> o, <V> o, [AM] o, [C] o, [S/O] o, [P] *zhè shì wǒ zuótiān gěi=ta-de* 這是我昨天給他的 ‘this is what I gave him yesterday’.

1.6 Fixed Expressions

1.6.1 FE_A: [A] <N> o, <Pro> o, <Num/Pro_{Dem}Cl> o, <Adj> o, <V> o, [AM] *yīgezìyīgezì-de niàn* 一個字一個字地念 ‘to read syllable by syllable’, [C] o, [S/O] o, [P] o.

1.6.2 FE_B: [A] <N> *méikāiyǎnxiào-de yàng-zi* 眉開眼笑的樣子 (CCL) ‘joyful appearance’, <Pro> ^R*méikāiyǎnxiào-de tā* 眉開眼笑的他 ‘he who is beaming with joy’, <Num/Pro_{Dem}Cl> *méikāiyǎnxiào-de nàwèi* 眉開眼笑的那位 ‘that joyful one’, <Adj> o, <V> o, [AM] *méikāiyǎnxiào-de shuō* 眉開眼笑地說 (CCL) ‘to speak joyfully’, [C] o, [S/O] o, [P] *nǐ bié dàjīngxǎoguài-de* 你別大驚小怪的 ‘don’t make such a fuss’.

2 Overview of Earlier Research

2.1 Earliest Studies

As already has been mentioned in the Introduction, first specialized articles on *-de* were published in the 1950s. It does not mean that no one had touched upon this issue before, but all the previous study was done within more general treatises on grammar. First grammatical descriptions of *-de* can be found in the earliest Mandarin grammars authored by European missionaries and early sinologists. In these works, *-de* is usually referred to as a ‘particle’ (Spanish *la partícula*, French *la particule*). The Spanish Dominican Francisco Varo (1627–1687) in his work *Arte de la Lengua Mandarina* (1703, completed in 1682), which is considered to be »the earliest published grammar

of any form of Chinese»,²⁶ had already mentioned various functions of ‘the postposed particle *tiě* (*articula tiě pospuesta*).²⁷ Varo in his description relied heavily on the grammatical categories inherited from the Greco-Roman tradition. So did other early works dealing with *-de* in Mandarin including *Notitia linguae sinicae* (1831, completed in 1728)²⁸ by the French Jesuit Joseph Henri Marie de Prémare (1666–1736), two works by British Protestant missionaries, namely *Elements of Chinese Grammar* (1814)²⁹ by Joshua Marshman (1768–1837) and *A Grammar of the Chinese Language* (1815)³⁰ by Robert Morrison (1782–1834), *Éléments de la grammaire chinoise* (1822)³¹ by the French sinologist Jean Pierre Abel-Rémusat (1788–1832) and finally *Anfangsgründe der chinesischen Grammatik mit Übungsstücken* (1883)³² by the well-known German sinologist and general linguist Georg von der Gabelentz (1840–1893). In spite of its age and methodological inadequacies, I consider Varo’s treatment of *-de* as one of the most detailed among these early works. Also Marshman’s description of *-de* is of some interest: although it is rather sketchy, the author’s remarks appear to be thought-provoking even today.

26 *Francisco Varo’s Grammar of the Mandarin Language (1703): An English Translation of »Arte de la Lengua Mandarin«*, tr. & ed. by W. South Coblin and Joseph A. Levi (Amsterdam; Philadelphia: John Benjamins, 2000), x.

27 Its probable phonetic value is [ti?]; the ‘Mandarin’ described by Varo is a Nanking-based *koine*, not Peking Mandarin. See *Francisco Varo’s Grammar of the Mandarin Language (1703)*, xiv–xv.

28 Joseph Henri de Prémare, *The Notitia Linguae Sinicae of Prémare Translated into English by J. G. Bridgman* [*Notitia linguae sinicae*, 1831, completed in 1728] (Canton: Office of the Chinese Repository, 1847), 28, 30–31.

29 Joshua Marshman, *Elements of Chinese Grammar with a Preliminary Dissertation on the Characters, and the Colloquial Medium of the Chinese, and an Appendix Containing the Ta-Hyob of Confucius with a Translation* (Serampore: Mission Press, 1814), 222–223, 270–271, 334–335, 378.

30 Robert Morrison, *A Grammar of the Chinese Language* (Serampore: Mission-press, 1815), 62, 68, 94.

31 Jean Pierre Abel-Rémusat, *Éléments de la grammaire chinoise, ou principes géneraux du kou-wen ou style antique, et du kouan-hoa, c’est-à-dire, de la langue commune généralement usitée dans l’Empire chinois* (Paris: Imprimerie royale, 1822), 112–114, 123.

32 Georg von der Gabelentz, *Anfangsgründe der chinesischen Grammatik mit Übungsstücken* (Leipzig: T. O. Weigel, 1883), 89–90, 95–97, .

2.2 *The 20th Century*

Since the first half of the 20th century, the Chinese linguistic community has opened discourses on both diachronic and synchronic issues concerning Mandarin *-de*. While the main interest of diachronic research has been the etymology of *-de*, synchronic debates have centred on its function(s) (*gōngnéng* 功能) and classification (*fēnlèi* 分類), i.e. the number of morphemes that ought to be distinguished and their subsequent classification into lexical categories (parts of speech). In fact, all these issues are interrelated: morphemes are distinguished on the basis of their functions and so is their part-of-speech membership. As far as the number of morphemes is concerned, the issue is whether *-de* is one morpheme or whether it represents two or more morphemes, and, if the latter is true, how many morphemes should be distinguished. Should modifying and non-modifying uses be considered one or two morphemes/functions? Should we distinguish between *-de* of adverbial modifiers 地 and attributives 的 or even between adjectival 的 and nominal 底 attributives? As for the classification, the basic problem has been whether *-de* should be a word (root) or an affix.

The earliest known domestic Sinitic grammar is *Mǎshì wéntōng* 馬氏文通 (1904)³³ by Mǎ Jiànzhōng 馬建忠 (1845–1900). The book was, however, devoted to Classical Sinitic, so I will not deal with it here. In the period from the publication of *Mǎshì wéntōng* until the 1930s many grammatical works imitating Western grammars had been published. This ‘period of imitation’³⁴ reached its peak in the work of Lí Jīnxī 黎錦熙 (1890–1978). Lí’s *New Grammar of the National Language* (1924)³⁵ was a synthesis of previous work and despite its faults influenced greatly later studies, unlike other grammar books of this period. As for *-de*, Lí distinguished four basic morphemes, a suffix (*yǔwěi* 語尾) and three root morphemes (words) belonging to different parts of speech: adpositions (*jiècí* 介詞),³⁶ relative pronouns (*liánjiē dàimíngcí* 聯接代名詞) and particles

33 Usually the year 1898 is stated because the prefaces are dated 9 April and 23 October 1898, respectively, but according to Peter J. Peverelli’s doctoral thesis »The History of Modern Chinese Grammar Studies« (Rijksuniversiteit te Leiden, 1986), »the complete work was not published until 1904« (59).

34 The term used by Peverelli in »The History of Modern Chinese Grammar Studies«, 102.

35 Lí Jīnxī 黎錦熙, *Xīnzhù guóyǔ wénfǎ* 新著國語文法 [New Grammar of the National Language, 1924] (Shànghǎi: Shāngwù yīnshūguǎn, 1925).

36 I translate the Chinese term as ‘adposition’ because the term *jiècí* itself tells nothing of its position. Although often translated as ‘preposition’, it literally means ‘an introducing word’ (cf. Chao, *A Grammar of Spoken Chinese*, 254). In the case of *-de*, Lí clearly states that it is placed

(*zhùcí* 助詞). Within each morpheme he distinguished further subcategories: adjectival (*xíngróngcí yǔwěi* 形容詞語尾) and adverbial suffixes (*fùcí yǔwěi* 副詞語尾), possessive adpositions (*lǐngshè jiècí* 領攝介詞) and quasi-adpositions (*zhǔnjiècí* 準介詞), nominal and adjectival relative pronouns.

In the 1940s, grammatical monographs of some of the most influential Chinese linguists, such as Lǚ Shūxiāng 呂叔湘 (1904–1998), Gāo Míngkǎi 高名凱 (1911–1965) and Wáng Lì 王力 (1900–1986), appeared. Their works dealt also with *-de*. Lǚ Shūxiāng and Gāo Míngkǎi even published special studies on this subject.

In the first volume of his Outline of Chinese Grammar (1941)³⁷ Lǚ Shūxiāng divided *-de* into three categories: a suffix (*cíwěi* 詞尾), a relation word (*guānxìcí* 關係詞) and a modal particle (*yǔqìcí* 語氣詞). However, Lǚ did not think that the suffix and the relation word were different morphemes. He kept them separated only because he thought that the latter was a syntactic-level element but he was well aware of a contradiction inherent in his analysis:

The character *-de* is often added after the adjective, e.g. *cóngmíng-de hái-zi* 聰明的孩子 ['a clever child'], *qīngqīng-de shuōhuà* 輕輕的說話 ['to speak in a low voice']. This *-de* should be also considered a suffix. However, the character *de* in phrases such as *wǒ rènshi de hái-zi* 我認識的孩子 ['the child that I know'] and the like cannot be considered a suffix in any way because *wǒ rènshi* 我認識 ['I know'] cannot be considered a word and the character *de* does not exclusively belong to *rènshi* 認識 ['know']. It is not easy to say whether these two *de* are identical. As far as *guóyǔ* ['national language', i.e. Mandarin] is concerned, if both their sound (*de*) and their function are identical, they should be one character [i.e. one morpheme, SV]. This is a theoretical problem which we do not have to investigate thoroughly. In the practical application, the question whether it is a suffix or not a suffix only arises when joining syllables of compound words in phonetic transcription. This is not an issue when writing in characters [...].³⁸

after the head unlike other *jiècí* that are placed before the head, therefore translating *jiècí* as 'preposition' would be highly inappropriate. When describing other languages, Mandarin usually renders prepositions as *qiánzhìcí* 前置詞 and postpositions as *hòuzhìcí* 後置詞.

37 Lǚ Shūxiāng 呂叔湘, *Zhōngguó wénfǎ yàolüè* 中國文法要略, 3 vols. [1941–44] (Shànghǎi: Shāngwù yìnsūguǎn, 1954).

38 “形容詞後面常加「的」字，例如聰明的孩子，輕輕的說話。這個「的」字應該也可以算是個詞尾。但是在「我認識的孩子」這類語句裏面的「的」字可不能算是詞尾，因為「我認識」不能算是一個詞，而「的」字並非專屬於「認識」的。這兩個「的」字是不是同一個字呢，這就很不容易說。就國語而論，聲音相同（*de*），作用相同，應該認為一個字，這

Two years later Lǚ Shūxiāng used the term *yǔzhùcí* 語助詞 ('particle') which corresponded to both his earlier terms 'suffix' and 'relation word'.³⁹

In 1944, Gāo Míngkǎi published a study on *-de*.⁴⁰ He criticised the usage of grammatical categories of Western (i.e. Indo-European) languages when describing Mandarin and came up with the idea that grammatical categories of a language should be established on the basis of their formal differentiation within that language: »If one studies the grammar of a language one should look if there is a particular grammatical form expressing a particular grammatical category in this language, in other words, if there is a particular grammatical form expressing a particular grammatical meaning«. ⁴¹ Based on the above consideration, Gāo argued that *-de* should constitute only one single morpheme ('word', *yǔcí* 語詞, in his terminology), which he called 'the determinative word' (*guīdìngcí* 規定詞) and defined its function as expressing a determinative relationship (*guīdìng guānxi* 規定關係). From a diachronic point of view, he recognized the existence of two determinative words, the adverbial and the 'other' one (*fùcí hé qítā guīdìngcí* 副詞和其他規定詞), but he emphasized that this distinction had been lost already by the end of the Sòng dynasty and does not exist in contemporary Mandarin any more.

Wáng Lì in his *Theory of Chinese Grammar* (1944) opposed the assertion of Lí Jīnxī that what in Wáng's view was »a word of the same nature« (*tóngyàng xìngzhìde yīge cí* 同樣性質的一個詞)⁴² should be called several different names, such as the adpositon, the pronoun and the suffix. Wáng analysed *-de* as a marker of modifying ranks (*xūshìpǐnde jìhào* 修飾品的記號), i.e. a secondary

是一個理論上的問題，我們不必深究。在實用方面，只有改寫拼音文字的時候，在複詞的連寫上，詞尾和非詞尾才有問題，用漢字書寫是不成問題的，[...].” Lǚ Shūxiāng, *Zhōngguó wénfǎ yàolüè*, 1: 17-18.

39 Lǚ Shūxiāng, »Lùn *-de* *-de* zhī biàn jí *-de* zìde yóulái» 論底、地之辨及底字的由來 [On the difference between *-de* and *-de* and on the origin of *-de*; 1943], in *Lǚ Shūxiāng quánjí* 呂叔湘全集 [The Complete Works of Lǚ Shūxiāng], 19 vols (Shěnyáng: Liáoníng jiàoyù chūbǎnshè, 2002), 2: 117-126.

40 Gāo Míngkǎi 高名凱, »Hànyǔ guīdìngcí *-de*« 漢語規定詞“的” [The Determinative *-de* in Chinese; 1944], in *Gāo Míngkǎi yǔyánxué lǚwénjí* 高名凱語言學論文集 [Collection of Gāo Míngkǎi's Linguistic Studies] (Běijīng: Shāngwù yīnshūguǎn, 1990), 26-73.

41 “要研究一種語言的語法，應當看這種語言中，是不是有一種特殊的語法形式去表示一種特殊的語法範疇，換言之，即是不是有一種特殊的語法形式去表示一種特殊的語法意義。” (Gāo Míngkǎi, »Hànyǔ guīdìngcí *-de*«, 32).

42 Wáng Lì, *Zhōngguó yǔfǎ lǐlùn* 中國語法理論 [Theory of Chinese Grammar, 1944-1945], 2 vols. (Shànghǎi: Shāngwù yīnshūguǎn, 1951), 1: 275.

(*cìpǐn* 次品) or a tertiary (*mòpǐn* 末品), thus merging the redefined Bloomfield's term 'marker'⁴³ with Jespersen's 'ranks'. Later, however, he preferred to speak of modifiers (*xiūshiyǔ* 修飾語) rather than of modifying ranks.⁴⁴ Apart from this, Wáng also distinguished a 'modal particle' (*yǔqìcí* 語氣詞) indicating explanation (*biǎomíng yǔqì* 表明語氣) and he thought that this particle had developed from the aforementioned marker. As seen above, Lǚ, Gāo and Wáng shared basically the same opinion of *-de* as a *single morpheme*, possibly distinguishing it from a homonymous modal particle.

In the second half of 1950s and at the beginning of 1960s two important grammatical syntheses appeared. The first one was the *Provisional System of Grammar for Teaching Chinese* (shortly just the *Provisional System*) published in 1956 under the editorial care of Zhāng Zhìgōng 張志公 (1918–1997)⁴⁵ and the second one was *Talks on Modern Chinese Grammar* that came out in 1961 and was edited by Dīng Shēngshù 丁聲樹 (1909–1989).⁴⁶

The *Provisional System* still has considerable influence, especially in educational materials. A number of Chinese school grammars and language textbooks are based on it, including several publications with the title *Xiàndài Hànyǔ* 現代漢語 (Modern Chinese) designed for Chinese universities as well as various practical grammars for foreigners published in the PRC such as *A Practical Chinese Grammar for Foreigners* by Lǐ Déjīn 李德津 and Chéng Měizhēn 程美珍.⁴⁷ In the *Provisional System*, *-de* is analysed as one of the so-called *jiégòu*

43 Wáng defines it as follows: “凡語法成分，附加於詞或仿語或句子形式的前面或後面，以表示它們的性質者，叫做記號。” »All grammatical elements [Wáng's translation of Vendryès' *morphèmes*], added initially or finally to a word, a phrase or a sentence pattern [i.e. a 'nexus', *liánxìshì* 連係式] in order to express their quality, are called markers«. Wáng Li, *Zhōngguó yǔfǎ lǐlùn*, 1: 263.

44 Wáng Liǎoyī 王了一, *Zhōngguó yǔfǎ gāngyào* 中國語法綱要 [Essentials of Chinese Grammar; 1946] (Shànghǎi: Kāimíng shūdiàn, 1949).

45 Zhāng Zhìgōng 張志公 & al., *Yǔfǎ hé yǔfǎ jiàoxué—jièshào »Zànnǐ Hànyǔ jiàoxué yǔfǎ xìtǒng«* 語法和語法教學——介紹《暫擬漢語教學語法系統》 [Grammar and Teaching of Grammar—Introducing the »Provisional System of Grammar for Teaching Chinese«] (Běijīng: Rénmín jiàoyù chūbǎnshè, 1956).

46 Dīng Shēngshù 丁聲樹 & al., *Xiàndài Hànyǔ yǔfǎ jiǎngbù* 現代漢語語法講話 [Talks on Modern Chinese Grammar] (Běijīng: Shāngwù yìnsūguǎn, 1961).

47 See Note 23.

zhùcí 結構助詞 that can be translated as ‘constructional particles’⁴⁸ or ‘structural particles’.⁴⁹ It seems that the term itself had been coined in the frame of the *Provisional System*.⁵⁰ The *Provisional System* distinguished *de* as an indicator of the attributive (*dìngyǔ-de biāozhì* 定語的標誌), written as 的, from *de* as an indicator of the adverbial modifier (*zhuàngyǔ-de biāozhì* 狀語的標誌), written as 地.

The *Talks on Modern Chinese Grammar* had summarized the views of Lǚ Shūxiāng, Gāo Míngkǎi and Wáng Lì. Two morphemes are distinguished in this book: the suffix (*cíwěi* 詞尾) attached after a word or phrase (practically corresponding to Lǚ’s ‘particle’, Gāo’s ‘determinative word’ and Wáng’s ‘marker of a modifier’) and the (modal) particle (*yǔzhùcí* 語助詞) expressing indicative mood (Lǚ’s and Wáng’s ‘modal particle’).

2.3 Zhū Déxī’s Analysis

Perhaps the most elaborate analysis of *-de* can be found in the works of Zhū Déxī. In 1961, Zhū published his famous article »Shuō *-de*« 說“的” (On *-de*) in the bi-monthly journal *Zhōngguó yǔwén* 中國語文 (Chinese Language, 1952ff). The study launched a vigorous debate on the said morpheme(s). Lǚ Shūxiāng also participated in these discussions, but it was mainly representatives of the younger generation of linguists who took part in the discourse—namely Huáng Jǐngxīn 黃景欣 (1935–1965), Lù Jiǎnmíng 陸儉明 (b1935), Yán Yībīng 言一兵 (1928)⁵¹ and Jì Yǒngxīng 季永興 (b1936). The debate addressed several fundamental questions: (1) Is *-de* a postposed element (*bòufù chéngfèn* 後附成分) or a linking element (*jièjiē chéngfèn* 介接成分)? (2) How many different morphemes does *-de* represent? (3) What method should be used to differentiate these morphemes? (4) Should the attributive and non-attributive *-de* be treated as one morpheme or two morphemes? (5) Is there a modal particle (*yǔqìcí* 語氣詞) *de*? For reasons of space I will not summarize the whole debate but focus solely on Zhū Déxī. Readers who are interested will find more information in the relevant articles of the discussants.⁵²

48 Li Chi, »*A Provisional System of Grammar for Teaching Chinese*« with Introduction and Commentary (Berkeley, CA: Center for Chinese Studies, Institute of International Studies, University of California, 1960), 113.

49 This is the usual English translation.

50 See Zhāng Zhigōng, *Yǔfǎ hé yǔfǎ jiàoxué*, 24.

51 Original name Wāng Yǎn 汪棧, also known as Wáng Gāng 王綱 or Wāng Tǎn 汪坦.

52 Huáng Jǐngxīn 黃景欣, »Dú “Shuō *-de*” bìng lùn xiàndài Hànyǔ yǔfǎ yánjiūde jǐge fāngfǎlùn wèntí« 讀《說“的”》並論現代漢語語法研究的幾個方法論問題 [Review of »On *-de*« and

Zhū Déxī considered *-de* a *postposed* element (*hòufù chéngfèn* 後附成分) and used the method of substitution to determine its functions (grammatical meanings). He added *-de* to different parts of speech and expressions (X) and observed what grammatical functions these constructions (X-*de*) acquired. He found three distinct functions whereupon he sorted out *three* homophonous morphemes: *-de₁*, *-de₂* and *-de₃*.

Table 1 *Classification of -de according to Zhū Déxī (1961).*

X	Functions of X- <i>de</i>	Morphemes
<ul style="list-style-type: none"> • disyllabic adverbs (1.2); monosyllabic, disyllabic and trisyllabic onomatopoeia (1.4.1); some fixed expressions (1.6.1); some disyllabic adjectives (1.1.1.3) 	adverbial (<i>fùcíxìng</i> 副詞性)	<i>de₁</i> = postposed element of adverbial grammatical units (<i>fùcíxìng yǔfǎ dānwèide hòufù chéngfèn</i> 副詞性語法單位的後附成分)
<ul style="list-style-type: none"> • complex forms of adjectives (1.1.2); four-syllable onomatopoeia (1.4.2); some fixed expressions (1.6.2) 	adjectival (<i>xíngróngcíxìng</i> 形容詞性)	<i>de₂</i> = postposed element of adjectival grammatical units (<i>xíngróngcíxìng yǔfǎ dānwèide hòufù chéngfèn</i> 形容詞性語法單位的後附成分)

Discussion on Some Methodological Problems in the Study of Modern Chinese Grammar], *Zhōngguó yǔwén* 中國語文 8-9/1962, 361-373, 411; Lǚ Shūxiāng 呂叔湘, »Guānyú “yǔyán dānwèide tóngyīxìng” dēngdēng» 關於“語言單位的同一性”等等 [On the »Unity of Grammatical Units« etc.], *Zhōngguó yǔwén* 11/1962, 483-495; Lù Jiǎnmíng 陸儉明, »-de de fēnhé wèntí jí qítā» “的”的分合問題及其它 [The Problem of Division and Unity of *-de* and Other Issues], in *Yǔyánxué lùncóng* 語言學論叢 [Essays on Linguistics], vol. 5 (Běijīng: Shāngwù yīnshūguǎn, 1963), 219-231; Yán Yībīng 言一兵, »Qūfēn -de de tóngyīn yǔsù wèntí—jiān píng Zhū Déxī xiānsheng “Shuō -de”» 區分“的”的同音語素問題——兼評朱德熙先生《說“的”》 [The Question of Dividing *-de* into several Homophonous Morphemes, with a Critique of Zhū Déxī’s Article »On *-de*«], *Zhōngguó yǔwén* 4/1965, 253-263; Jì Yǒngxīng 季永興, »Tán »Shuō -de« 談《說“的”》 [Discussing »On *-de*«], *Zhōngguó yǔwén* 中國語文 5/1965, 363-364; Zhū Déxī, »Guānyú “Shuō -de”» 關於《說“的”》 [About »On *-de*«], *Zhōngguó yǔwén* 1/1966, 37-46.

• base forms of adjectives (1.1.1); nominals (1.3); verbs and verbal constructions (1.5)

nominal (*míngcíxìng* 名詞性)

*de*₃ = postposed element of nominal grammatical units (*míngcíxìng yǔfǎ dānwèide hòufù chéngfèn* 名詞性語法單位的後附成分)

In the aforementioned article, Zhū was careful enough not to specify whether *X-de* should be analysed as a word or a bigger unit, neither he specified whether *-de* should be an affix or an independent word.⁵³ However, in his later works Zhū spoke of *-de*₁ and *-de*₂ as of adverbial and adjectival suffixes (*fúcí hòuzhùi* 副詞後綴 and *xíngróngcí hòuzhùi* 形容詞後綴;⁵⁴ in his last article, Zhū used the term *cíwěi* 詞尾 rather than *hòuzhùi* 後綴 to express ‘suffix’⁵⁵) and he called *-de*₃ a nominalizing marker (*míngcíhuà biāoji* 名詞化標記).⁵⁶ As for the remaining problems, Zhū treated the attributive and non-attributive uses of *-de*₃ as *one* morpheme rightly observing that if we considered them two morphemes and postulated *-de*₄, this *-de*₄ would be in fact in complementary distribution with *-de*₃. Zhū refused the opinion that the sentence-final *-de* ought to be analysed as a modal particle and considered it *-de*₃ instead. Later, Zhū shifted his attention to the comparative studies of adverbial and adjectival suffixes and nominalizers in various Sinitic languages and dialects. He published these studies in the journal *Fāngyán* (Dialect; 1979ff).⁵⁷ This comparative research seems to support Zhū’s basic division.

As mentioned above, Zhū assumed that the function of *-de*₃ was a nominalizing one and this was the weakest point of his theory. He must have been well aware that the difference between N and N-*de*₃ could hardly be explained by sheer nominalization. The noun has a nominal character by itself; however, its function *does* change by adding *-de*, unlike *X-de*₁ and *X-de*₂ where

53 Zhū Déxī, »Shuō *-de*«, 98.

54 Zhū Déxī, *Yǔfǎ jiǎngyì* 語法講義 [Lectures on Grammar] (Běijīng: Shāngwù yīnshūguǎn, 1982).

55 Zhū Déxī, »Cóng fāngyán hé lìshǐ kàn zhuàngtài xíngróngcíde míngcíhuà« 從方言和歷史看狀態形容詞的名詞化 [Nominalization of Descriptive Adjectives from Dialectal and Historical Points of View], *Fāngyán* 方言 2/1993, 81.

56 Zhū Déxī, »Cóng fāngyán hé lìshǐ kàn zhuàngtài xíngróngcíde míngcíhuà«, 82.

57 Zhū Déxī, »Běijīnghuà, Guǎngzhōuhuà, Wénshuǐhuà hé Fúzhōuhuà li de *-de* zì« 北京話、廣州話、文水話和福州話裡的“的”字 [The Character *-de* in Pekinese, Cantonese and Foo-chowese], *Fāngyán* 3/1980, 161–165; »Cóng fāngyán hé lìshǐ kàn zhuàngtài xíngróngcíde míngcíhuà«, 81–100.

X (both the adverb and the adjectival roots) preserves its function basically unchanged after taking an affix. N-*de* does not refer to N but to someone or something else and its function corresponds to the genitive or possessive of Indo-European languages, e.g. *fuqin* 父親 ('father') is something different than *fuqin-de* 父親的 ('father's').⁵⁸ In order to account for this contradiction, Zhū later coined the terms 'self-referentiality' (*zìzhǐ* 自指) and 'transreferentiality' (*zhuǎnzhi* 轉指) and explained X-*de*₃ as sometimes being self-referential, other times transreferential (the majority of cases).⁵⁹ However, as early as 1965, a simpler explanation was suggested by Yán Yībīng who came up with the idea that the function of Zhū's -*de*₃ was to turn the preceding word or phrase into a 'unit of nominal-adjectival nature' (*jìngshù xíngróngcíxìngde dānwèi* 靜屬形容詞性的單位).⁶⁰

Table 2
Mandarin -de: correspondence between its sound, the current character orthography based on the Provisional System (1956) and the respective morphemes according to Zhū Déxī's analysis (1961, 1993).

Sound	Characters	Morphemes
[dɛ]	地	- <i>de</i> ₁ (adverbial suffix)
	的	- <i>de</i> ₂ (adjectival suffix) - <i>de</i> ₃ (nominalizing marker)

58 Here is a striking difference between Mandarin and Old Sinitic. The formally similar Old Sinitic construction *fù-zhě* 父者 does not mean 'father's' but 'he who is the father' and corresponds to Mandarin *zuò fuqin-de* 做父親的 rather than *fuqin-de* 父親的.

59 Zhū Déxī, »Zìzhǐ hé zhuǎnzhi—Hànyǔ míngcíhuà biāoji -de, -zhě, suǒ-, zhǐde yǔfǎ gōngnéng hé yǔyì gōngnéng«, 自指和轉指——漢語名詞化標記“的、者、所、之”的語法功能和語義功能 [Self-referentiality and Transreferentiality—Grammatical and Semantic Functions of Chinese Nominalizing Markers -de, -zhě, suǒ- and zhǐ], *Fāngyán* 1/1983, 16-31.

60 Yán Yībīng, »Qūfēn de de tóngyīn yǔsù wèntí«, 258.

2.4 *The Last Few Decades*

All major Mandarin grammars have paid attention to *-de* in varying degrees. Yuen Ren Chao in his *opus magnum* published in 1968⁶¹ distinguished the suffix *-de* having the function of possessive (*kēxué-de fēnxi* 科學的分析 ‘the analysis of sciences’), adjectival (*kēxué-de fēnxi* 科學的分析 ‘scientific analysis’) and adverbial ending (*kēxué-de fēnxi* 科學地分析 ‘analyses scientifically’) on the one hand and the particle or phrase enclitic *=de* expressing subordination—as a marker of explicit modification (*kōngwǎn* 空碗 ‘an empty bowl’ vs *kōng=de wǎn* 空的碗 ‘a bowl that is empty’) or a marker of nonlexical phrases (*lǎoyùmǐ* 老玉米 ‘corn’ vs *lǎo=de yùmǐ* 老的玉米 ‘corn which has grown tough’)—and nominalization on the other hand. Another well-known grammar book *Mandarin Chinese: A Functional Reference Grammar* by Charles N. Li and Sandra A. Thompson (1981)⁶² also makes a distinction between the suffix and the particle. The suffix derives manner adverbs from adjectives and from abstract nouns (*tā kuàikuài-de zǒu* 他快地走 ‘he walked quickly’, *kēxué-de* 科學地 ‘scientifically’) while the particle forms associative phrases according to the formula NP *de* NP (*nǐ de nàběn shū* 你的那本書 ‘that book of yours’) and relative clauses VP *de* NP or Adj *de* NP (*hóng de huā* 紅的花 ‘a flower that is red’). *Chinese: A Comprehensive Grammar* by Yip Po-Ching and Don Rimmington (2004)⁶³ distinguishes the particle *de* 的 and the adverbial marker *de* 地 which is reminiscent of the *Provisional System*.

Over the last two decades a large number of studies on *-de* of varying quality appeared in China. The topics often involve various practical grammatical and orthographic problems, e.g. ‘hiding and appearing’ (*yǐnxiàn* 隱現) of *-de* (the rules when *-de* can be omitted and when not), the problem of ‘division vs unity’ (*fēnbé* 分合), i.e. if the written language should distinguish between 的 and 地 or if it is an artificial distinction etc. The majority of the studies are journal articles, but in 2006 a monograph with a title *A Study on Form Word »de« and its Related Matters* by Xú Yángchūn 徐陽春 came out.⁶⁴ It has been based on the so-called ‘three-level grammatical theory’ (*sānge píngmiàn yǔfǎ lǐlùn* 三個平面語法理論, also called ‘three-dimensional grammar’,

61 See Note 10.

62 Charles N. Li and Sandra A. Thompson, *Mandarin Chinese: A Functional Reference Grammar* (Berkeley, CA: University of California Press, 1981).

63 Yip Po-Ching and Don Rimmington, *Chinese: A Comprehensive Grammar* (London; New York: Routledge, 2004).

64 See Note 5.

sānwéi yǔfǎ 三維語法)⁶⁵ that has been quite popular in China recently but it makes use of other branches of linguistics, such as cognitive linguistics, dialectology and historical linguistics, as well. Although the monograph does not bring really new insights and neither is it very accurate in some descriptions, it lists an extensive bibliography that makes it a useful reference book on the subject.

In the last few decades the majority of synchronic studies dealing with *-de* by Western scholars or Western-educated Chinese scholars have been based on various schools of transformational-generative grammar. Perhaps the first generativist Mandarin grammar was published in 1971 by Anne Yue Hashimoto under the title of »Mandarin Syntactic Structures«⁶⁶ in broad hint at Chomsky's pioneering work. From the many works dealing with *-de* in the generative framework let us mention at least »On the functions of Mandarin *de*« (1983) by Claudia Ross,⁶⁷ »*de* in Mandarin« (1986) by Lisa Lai-Shen Cheng,⁶⁸ »Chinese DE and the DE-Construction« (1999) by Niina Ning Zhang,⁶⁹ »On the Status of 'Modifying' DE and the Structure of the Chinese DP« (2002) by Andrew Simpson,⁷⁰ »The in subordinate subordinator *de* in Mandarin Chinese« (2007) by Waltraud Paul⁷¹ and »*De* 的 as an Underspecified Classifier: First Explorations« (2009) by Lisa Lai-Shen Cheng and Rint Sybesma.⁷²

65 This theory or 'linguistic school' was created in the PRC in the 1980s. It encompasses three language levels, i.e. the syntactic (*jǔfǎ* 句法), semantic (*yǔyì* 語義) and pragmatic (*yǔyòng* 語用) level, hence the name. As far as I know, it is hardly known outside China; however there are some Western studies in the field of applied linguistics based on similar concepts; cf. Diane Larsen-Freeman, »Teaching Grammar«, in *Teaching English as a Second or Foreign Language*, ed. by Marianne Celce-Murcia (Boston: Heinle & Heinle, 2nd ed. 1991), 279–283. Among the pioneers of the 'three-level grammatical theory' are Hú Yùshù 胡裕樹 (1918–2001), Zhāng Bīn 張斌 (b1920) and Fàn Xiǎo 范曉 (b1935), who is also the author of *Sānge píngmiànde yǔfǎguān* 三個平面的語法觀 [Three-Level Grammar View] (Běijīng: Běijīng yǔyán wénhuà dàxué chūbǎnshè, 1996), the representative work of this Chinese linguistic school.

66 Anne Yue Hashimoto [Yue Oi-kan 余靄芹], *Unicorn / Chi-Lin* 麒麟 8 (1971), 1–149.

67 *Journal of Chinese Linguistics* 11, 2 (1983), 214–246.

68 *The Canadian Journal of Linguistics* 31, 4 (1986), 313–326.

69 *Syntaxis, An International Journal of Syntactic Research*, 2 (1999), 27–49.

70 In *On the Formal Way to Chinese Languages*, ed. by Sze-Wing Tang and Chen-Sheng Luther Liu (Stanford, CA: Center for the Study of Language and Information, 2002), 74–101.

71 <clrao.ehess.fr/document.php?id=177> (last retrieval Oct 18, 2011).

72 *Yǔyánxué lǔncóng* 語言學論叢 vol. 39 (Běijīng: Shāngwù yīnshūguǎn, 2009), 123–156.

3 *Morphological Nature of -de and X-de*3.1 *Nominal Adjectivals*

At the beginning of this chapter, I would like to emphasize that what I propose here is a *possible* interpretation. Definitely, I do not think this is the only correct solution and I am well aware that »in every language, everything always applies only to a certain extent«. ⁷³

I start my considerations from Zhū Déxī's analysis, which I basically agree with except one point. This point is the designation of *-de*₃ as a nominalizing marker. Zhū's analysis was based primarily on the syntactic and functional criteria and paid little attention to semantic aspects. I therefore share the view of Yán Yībīng that the function of *-de*₃ is rather a sort of adjectivization which, however, is quite different from the adjectivization by the means of the suffix *-de*₂. As Yán Yībīng argues in his article, the Mandarin adjective, unlike adjectives in Indo-European languages, has a verbal character, not a nominal one. Such are the non-derived adjectives as well as the adjectives marked by the suffix *-de*₂. However, *-de*₃ forms adjectival constructions of nominal nature similar to Indo-European adjectives. ⁷⁴ Yán Yībīng refers to these constructions as 'grammatical units of nominal-adjectival nature' ⁷⁵ and I will call them simply 'nominal adjectivals' (hence NA). Here I would like to note that Mandarin nominal adjectivals differ from English adjectives in that they can stand alone both in modifying and non-modifying functions just like adjectives in some Indo-European languages other than English, for instance in Slovak.

Slovak

- | | | | |
|-----|------------------------|----------------|----------------|
| (1) | <i>chc-e-m</i> | <i>čist-ú</i> | <i>košeľ-u</i> |
| | want-PRES.IND.ACT-1.SG | clean-F.SG.ACC | shirt-F.SG.ACC |
| | 'I want a clean shirt' | | |
| (2) | <i>chc-e-m</i> | <i>čist-ú</i> | |
| | want-PRES.IND.ACT-1.SG | clean-F.SG.ACC | |
| | 'I want a clean one' | | |

73 »v každém jazyce vždy všechno platí jen do jisté míry« from Vladimír Skalička, *Souborné dílo* [Complete Works], 3 vols, ed. by František Čermák & al. (Praha: Karolinum, 2004), 1: 15.

74 Particularly interesting in this regard is the fact that it is the adjectival forms affixed with *-de* what is given in bilingual dictionaries as Mandarin equivalents of English, German, Czech etc. adjectives.

75 Yán Yībīng, »Qūfēn *-de* de tóngyīn yūsù wèntí«, 253–263.

- Mandarin
- (3) 我 要 一件 乾淨的 襯衣
wǒ *yào* *yījiàn* *gānjìng-de* *chèn yī*
 I want one-Cla clean-NA shirt
 ‘I want a clean shirt’
- (4) 我 要 一件 乾淨的
wǒ *yào* *yījiàn* *gānjìng-de*
 I want one-Cla clean-NA
 ‘I want a clean one.’

So we know that $-de_3$ forms ‘something’ of nominal-adjectival nature. Naturally, the question arises what this ‘something’ is. Both Zhū and Yán left this question open and to my knowledge it has remained without a satisfactory answer to this day.

Although Zhū as early as 1961 convincingly demonstrated that $-de_3$ is a postposed element, in some recent articles we still encounter the view that it is a linking element. In my opinion, this is what makes the appropriate explanation of $-de_3$ so difficult. Referring to Zhū’s analysis, I reject the assertions that $-de_3$ is a linker⁷⁶ or a subordinator⁷⁷ etc. If we agree with the argument that $-de_3$ is a postposed element, only two possibilities remain how to interpret $X-de_3$: it must be either a clause or a word. In the former case, $-de_3$ would be a syntactic marker, while in the latter case it would be an affix. $X-de_3$ cannot be a phrase because $-de_3$ is a marker of nominal adjectivization, not a marker of attributive relation. Zhū Déxī proved quite convincingly that the attributive function is only one of several functions that $X-de_3$ can take up in the sentence.⁷⁸

As Paul has demonstrated, in the case of adjectives, it is quite problematical to consider $X-de_3$ a clause »since adjectives that cannot be used predicatively can be used adnominally in conjunction with de «. ⁷⁹ Such non-predicative adjectives include *fāng* 方 ‘square’, *gòngtóng* 共同 ‘common’, *yuánlái*

76 Marcel den Dikken and Pornsiri Singhapreecha, »Complex Noun Phrases and Linkers«, *Syntax* 7,1 (2004), 1–54.

77 Paul, »Adjectives in Mandarin Chinese«, 117.

78 Zhū Déxī, »Shuō $-de$ «, 112–113.

79 Paul, »Adjectives in Mandarin Chinese«, 115.

原來 ‘original’ etc. (see 1.1.1.4). On the other hand, in the case of verbal constructions Paul regards *X-de₃* as a relative clause. We can consider two possibilities here: (1) *-de₃* is sometimes a suffix and other times a syntactic marker or (2) *-de₃* is always a suffix and *X-de₃* is a word just like *X-de₁* and *X-de₂*. In my view, it is problematical to regard a semantically and phonemically identical morpheme as a suffix in some cases and as a function word in others; on the other hand, it is pointless to postulate two morphemes because it would be an artificially created complementary distribution. These considerations lead us to the conclusion that it is substantiated to regard *-de₃* as an *affix* and *X-de₃* as a *word*. Yán Yībīng also suggested this as an option, but he did not go on pursuing this idea in greater detail.⁸⁰

The proposed solution can be easily accepted in cases where X is a noun or a pronoun (1.3.1, 1.3.2), an adjective (1.1) or a simple verb (1.5.1.1). However, in cases where X seems to be a co-ordinate construction, a V-O construction (1.5.2) or even a clause (1.5.1.2, 1.5.2.3-4, 1.5.3.2), my assumption may look controversial at first glance. In fact, the use of affixes in these constructions is not impossible. The use of *-de₃* after a co-ordinate construction can be explained as suspended affixation and analyzed not as *X-de₃* but as *X + X-de₃*, with an empty slot after the first X which may or may not be filled up with an affix. A similar phenomenon is found in Turkish, where the first noun of a co-ordinative construction can be in the absolute case, which may stand for any case, or its empty slot may be filled with a case-ending (although this is less usual):

Turkish⁸¹

- (5) *sıhbat ve afiyet-te*
 health and well-being-LOC
 ‘in health and well-being’
- (6) *sıhbat-te ve afiyet-te*
 health-LOC and well-being-LOC
 ‘in health and in well-being’

Mandarin

- (7) 我 和 哥哥的
wǒ hé gēge-de
 I and elder brother-NA
 ‘mine and my elder brother’s (i.e. one belonging to both of us)’

80 Yán Yībīng, »Qūfēn *-de* de tóngyīn yùsù wèntí«, 263.

81 Geoffrey Lewis, *Turkish Grammar*, 2nd ed. (Oxford: Oxford University Press, 2000), 34.

- (8) 我的 和 哥哥的
wǒ-de *hé* *gēge-de*
 I-NA and elder brother-NA
 ‘mine and my elder brother’s (i.e. one belonging to me and one belonging to him)’

In the case of clauses, I believe that *-de₃* is not necessarily related to the whole clause but *only to the verb*. This means that I analyze clauses such as *wǒ zuótiān kànjiàn-de* 我昨天看見的 ‘what I saw yesterday’ as [*wǒ* [*zuótiān* [*kànjiàn-de*]]] and not as [[*wǒ* [*zuótiān kànjiàn*]]-*de*]. Evidence supporting my arguments includes the fact that if the prefix *suǒ-* 所 with a similar meaning like *-de₃* is used, we put it before the verb and not before the whole clause:

- (9) 我 昨天 所看見的
wǒ *zuótiān* *suǒ-kànjiàn-de*
 I yesterday *suǒ-see-NA*
 ‘what I saw yesterday’
- (10) ^U所 我 昨天 看見 的
^U*suǒ-* *wǒ* *zuótiān* *kànjiàn* *-de*
^U*suǒ-* I yesterday see NA
 ‘what I saw yesterday’

3.2 Edge Inflection and Object Incorporation

If a verb takes an object, then *-de₃* is suffixed to the object.⁸² We can regard this phenomenon as ‘edge inflection’ as described by Zwicky (1987) referring to the English possessive.⁸³ In these constructions, *-de₃* is semantically linked to the verb but formally it is connected with the object:

- (11) 吃飯的
chīfàn-de
 eat-meal-NA
 ‘(s/he who is) eating’

82 Here I do not mean phrases such as *chī-de fàn* 吃的飯 ‘eaten meal, meal for eating’ where *-de* can be analysed as added to a simple verb.

83 Arnold M. Zwicky, »Suppressing the Zs«, *Journal of Linguistics* 23 (1987), 133–148.

- (12) 指導 一個 偉大的 革命運動的 (政黨)
zhǐdǎo yīgè wěidà-de gémìngyùndòng-de (zhèngdǎng)
 lead one-Cla great-NA revolutionary-movement-NA
 (politics-party)
 ‘(a political party) leading a great revolutionary movement’⁸⁴

Edge inflection can be understood as a consequence of the relatively close connection between the verb and its object in Mandarin. As far as the type in the example (11) is concerned, we can even consider the whole V-O construction a verb with an *incorporated* object (Vo) as it is often the case in polysynthetic languages. The reasons for this interpretation are as follows: (a) the connections of monosyllabic transitive verbs with generic monosyllabic objects are to a large extent (not absolutely) obligatory when no specific object is expressed, (b) these generic objects are ‘dummy’ objects, they just complete the verbs prosodically and semantically, (c) bound morphemes can also be used as objects in these constructions, e.g. *lǐfà* 理髮 ‘to have one’s hair cut’ where *fà* 髮 ‘hair’ is a bound morpheme that cannot be used independently,⁸⁵ (d) Mandarin has a strong tendency to create disyllabic words, (e) Vos are often lexicalized items occurring in dictionaries, e.g. *lǐfà* 理髮, *chīfàn* 吃飯 ‘to eat, to make a living’ and *zǒulù* 走路 ‘to walk’ are all listed in the *Modern Chinese Dictionary* as separate entries.⁸⁶

One may raise objections that (a’) syntactic level units can be inserted between the verb and its incorporated object, (b’) tense-aspect suffixes are attached directly to the verb and not to the object, (c’) unlike many languages commonly referred to as polysynthetic there is no morphological indication of incorporation in Mandarin.

Well, I admit that in Mandarin the connection between the verb and its incorporated object is not as tight as in the case of other types of compounds, on the other hand, it is tighter than in normal syntactic V-O constructions. As far as the insertion of syntactic units between two parts of a word is concerned, there is a similar situation with separable prefixes of German, Dutch or Hungarian verbs.

84 *Máo Zhǔxí yǔlù* 毛主席語錄 [Quotations from Chairman Mao], ed. by People’s Liberation Army General Political Department ([s.l.]: Xīnhuá shūdiàn, 1968), 4.

85 The corresponding free morpheme would be *tóufa* 頭髮.

86 *Xiàndài Hànyǔ cídiǎn* 現代漢語詞典 [Modern Chinese Dictionary] (Běijīng: Shāngwù yīnshūguǎn, 2003), 774, 165, 1676.

German

- (13) *ich muß-o* *auf-steht-en*
 I must-1.SG.PRES.IND.ACT up-get-INF
 'I have to get up.'
- (14) *ich steht-e* *jed-en* *Tag-o* *um sechs Uhr* *auf*
 I get-1.SG.PRES.IND.ACT every-M.SG.ACC.day-M.SG.ACC at six o'clock up
 'I get up at six o'clock every day'

Mandarin

- (15) 我 在 吃飯呢
wǒ zài chīfàn=ne
 I be (at) eat-meal=PROG
 'I am eating'
- (16) 今天 我 吃了 兩頓 飯
jīntiān wǒ chī-le liǎngdùn fàn
 today I eat-PERF two-Cla meal
 'I have had two meals today'
- (17) 吃 你的 飯
chī nǐ-de fàn
 eat you-NA meal
 'eat your meal'

Morover, sometimes even 'straight' disyllabic verbs tend to be separated in Mandarin, therefore separability cannot be viewed as evidence proving absence of lexical integrity:

- (18) 他 在 這兒 工作了 三年 了
tā zài zhèr gōngzuò-le sānnián= le
 he be (at) here work-PERF three-year= MOD
 'he has worked here for three years'
- (19) 工 你的 作
gōng nǐ-de zuò
 work you-NA work
 'do your work'

Although tense-aspect suffixes are usually attached directly to the verb, sometimes they happen to be attached to the incorporated object. Such usages, although may be considered grammatically incorrect (but not ungrammatical!),

demonstrate that tightening of the relationship between the verb and its object is in progress.

- (20) 有些 人 說 他 從來 沒 吸煙過⁸⁷
yǒuxiē rén shuō tā cónglái méi xīyān-guo
 some people say he all along NEG inhale-smoke(N)-PAST
 ‘some people say they have never smoked’

Indeed, except the aforementioned facts (1–5) there are no other indicators, i.e. morphological markers, of object incorporation in Mandarin. This can be seen very clearly when compared to the notoriously well-known examples of object incorporation in Nahuatl that have been often quoted since Humboldt’s times:

- Nahuatl⁸⁸
 (21) *nī-naca-qua*
 I-meat-eat
 ‘I eat meat, I am a meat-eater’
- (22) *nī-c-qua in naca-tl*
 I-it-eat the meat-ABS
 ‘I eat the meat’
- Mandarin
 (23) 我 吃飯
wǒ chī-fàn
 I eat-meal
 ‘I (will) eat’

However, as claimed by Skalička already in 1955, »the compounds are clearest where the polysynthetic type is the weakest, that is to say where the word is absolutely clear [...]. In genuine polysynthetic languages (e.g. Chinese, Indone-

87 »Fèi’ái huànzǎ zhě zǎoqī wú míngxiǎn zhèngzhuàng« 肺癌患者早期無明顯症狀 [Lung Cancer Patients Have No Obvious Early Symptoms], ed. by lijun [sic], <health.china.com.cn/html/lungcancerfa/zqzz//201011/22-79032.html> (last retrieval Oct 18, 2011).

88 Wilhelm von Humboldt, *Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluß auf die geistige Entwicklung des Menschengeschlechts* (Berlin: Druckerei der Königlichen Akademie der Wissenschaften, 1836), 165.

sian), the compound can not be determined so uniquely because we can not see so clearly the elements that make up the word and those that do not.⁸⁹

3.3 *Affixes vs Clitics*

As already mentioned in 3.1, there is a problem whether to classify *-de*₃ as an affix or a word. I have argued that it is quite legitimate to consider it an affix. However, some authors (Yuen Ren Chao,⁹⁰ Lin Hua⁹¹ or Sun Chaofen,⁹² to mention just a few) use to analyse *-de* together with other Mandarin ‘particles’ as clitics which, in my opinion, is only a different way of saying it is a word. Sets of criteria have been worked out to distinguish clitics from inflectional affixes—the most widely used being those by Zwicky and Pullum:

- A. Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems.
- B. Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups.
- C. Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups.
- D. Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups.
- E. Syntactic rules can affect affixed words, but cannot affect clitic groups.
- F. Clitics can attach to material already containing clitics, but affixes cannot.⁹³

The degree of selection in (A) is a very relative criterion; however, it seems that *-de*₁, *-de*₂ and *-de*₃ are less selective not only than affixes in Indo-European languages but also than the Mandarin plural marker *-men* 們 that is usually considered a suffix.⁹⁴ There are some arbitrary gaps (B) as far as *-de*₁ and *-de*₂

89 »[L]es composés sont les plus nets là où le type polysynthétique est le plus faible, c’est-à-dire où le mot est absolument clair [...]. Dans les véritables langues polysynthétiques (par exemple en chinois, en indonésien), le composé ne peut pas être aussi nettement désigné, car on n’aperçoit pas aussi clairement les éléments composant le mot et ceux qui ne le composent pas.« Vladimír Skalička, »Sur les langues polysynthétiques«, *Archiv orientální* 23 (1955), 15–16.

90 Chao, *A Grammar of Spoken Chinese*, 254.

91 Lin Hua, *Grammar of Mandarin Chinese* (München: Lincom Europa, 2001), 117.

92 Sun Chaofen, *Chinese: A Linguistic Introduction* (Cambridge University Press, 2006), 75.

93 Arnold M. Zwicky and Geoffrey K. Pullum, »Cliticization vs. Inflection: English N’T«, *Language* 59,3 (1983), 503–504.

94 Chao, *A Grammar of Spoken Chinese*, 244; Zhū Déxī, *Yǔfǎ jiāngyì*, 31; Yip and Rimmington, *Chinese: A Comprehensive Grammar*, 10 *passim*.

are concerned, e.g. there are some adjectives that do not take *-de*₁ (I.1.1.2) or do not have complex forms and therefore do not take *-de*₂ (I.1.1.3). On the other hand, there seem to be no such gaps within *X-de*₃. According to the criterion (C) all the morphemes in question should be analysed as clitics but this criterion is hardly applicable to Mandarin because to my knowledge there are virtually no morphological idiosyncrasies in this language and I am inclined to believe that this criterion is fully applicable only to languages that are fusional to some degree. *X-de*₃ unlike *X-de*₁ and *X-de*₂ shows some semantic idiosyncrasies (D), e.g. *chī-de*₃ 吃的 normally means ‘food’ not ‘eating/eaten (one)’ (cf. *kàn-de* 看的 ‘looking/looked at’) and *nǚ-de*₃ 女的 means just ‘a woman’ not ‘feminine’ or ‘woman’s’.⁹⁵ (E) is in my view the most important criterion. As shown in examples in the first part of this paper as well as fully testified in the above mentioned studies by Zhū Déxī and others, *X-de*₃ is *one unit* and it is treated as such by syntactic operations. That is to say *-de*₃ is not let us say a marker of attributive but it together with its host (root) makes up a unit that can enter an attributive relation as a whole. The last criterion (F) depends to a large extent on what one considers clitics and what not and even then it is still quite arguable as it may be in contradiction with ‘edge inflection’ mentioned above. If we regard the plural markers and tense-aspect markers as suffixes and consider the unstressed personal pronouns in postverbal position to be vehicles of edge inflection, then we can analyze *-de*₁, *-de*₂ and *-de*₃ as affixes. I have summarized my analysis in Table 3:

95 An interesting situation occurs when one wants to say for instance *nàge nǚ-de(-de) bāo* 那個女的(的)包 ‘that woman’s bag’. According to Yuen Ren Chao, »nobody says *de de* ever in any context« (*A Grammar of Spoken Chinese*, 298) and it seems that this is true with the older generation; however, the younger generation may not follow this rule. My parents-in-law, who are both native of Hándān 邯鄲 in Héběi 河北 Province, would always say only one *-de* in the aforementioned phrase, but my wife would prefer *-de-de*, and so would another native Mandarin speaker about the age of 30 I have interviewed about this topic. It seems that this difference of language usage has something to do with modern language education at schools and greater awareness of formal grammar. This issue would deserve further investigation.

Table 3 *Mandarin Morphemes*
 $-de_1$, $-de_2$ and $-de_3$: *Affixes vs Clitics According to the Zwicky-Pullum Criteria*

<i>Morphemes</i>	de_1	de_2	de_3
<i>Criteria</i>			
A	Clitic	Clitic	Clitic
B	Affix	Affix	Clitic
C	Clitic	Clitic	Clitic
D	Clitic	Clitic	Affix
E	Affix	Affix	Affix
F	Affix	Affix	Affix

As seen in the table above, the Zwicky-Pullum criteria are not particularly helpful as far as Mandarin is concerned—and there is a similar problem regarding for instance bound pronouns in French.⁹⁶ However, if we disregard the criterion C that can be hardly applied outside fusional languages, the arguments in favour of affixation are slightly more numerous and according to the important criterion E all three morphemes can be analyzed as affixes.

3.4 *Derivation vs Inflection*

Another question is what kind of affixes do $-de_1$, $-de_2$ and $-de_3$ represent. Do they derive new words or do they create inflectional forms within the same paradigm? According to Stump⁹⁷ the following five criteria are commonly used to distinguish inflection from derivation:

- 1) the criterion of change in lexical meaning or part of speech (derivation usually changes lexical meaning, part of speech, or both)
 - 2) the criterion of syntactic determination (inflection is syntactically determined)
 - 3) the criterion of productivity (inflection is usually more productive)
 - 4) the criterion of semantic regularity (inflection tends to be more regular)
 - 5) the criterion of closure (inflection closes words to further derivation)
- 1) $-de_1$ makes adverbs from adjectives (1.1.1.3), onomatopoeia (1.4.1) and fixed expressions (1.6.1) or stresses the adverbial character of adverbs (1.2); $-de_2$

96 Gregory T. Stump, »Inflection«, in *The Handbook of Morphology*, ed. by Andrew Spencer and Arnold M. Zwicky (Oxford: Blackwell Publishers, 1998), 21.

97 Stump, »Inflection«, 14–18.

produces adjectives from onomatopoeia (1.4.2) and fixed expressions (1.6.2) and complements the complex forms of adjectives (1.1.2); and finally *-de₃* makes nominal adjectivals from adjectives (1.1.1), nominals (1.3) and verbs (1.5). That is to say *-de₁* and *-de₂* sometimes involve the change of part of speech but not the change of lexical meaning. *-de₃* on the other hand does change lexical meaning (*wǒ-de* 我的 ‘my, mine’ is something different than *wǒ* 我 ‘I, me’ and *màicài-de* 賣菜的 ‘vegetable vendor’ is different than *màicài* 賣菜 ‘to sell vegetables’) but it is difficult to decide if NA should be considered a part of speech (e.g. a sort of adjective) or a grammatical category (e.g. something analogous to participles in Indo-European languages).

- 2) *-de₁* is not syntactically determined as there is no syntactic context requiring *-de*-modified adverbs (*fēicháng-de* 非常地 ‘extremely’) and excluding *-de*-less ones (*fēicháng* 非常) but *-de₂* and *-de₃* are (e.g. in the subject or object positions they are not interchangeable with *-de*-less adjectives).
- 3) As to productivity, all three morphemes are highly productive; however, *de₃* seems to be more productive than *-de₁* and *-de₂*.
- 4) All three morphemes are semantically quite regular, only *-de₃* shows rare cases of semantic idiosyncrasy.
- 5) By the criterion of closure, which, however, is quite questionable in some languages, all the three morphemes in question close words to further derivation. Again, I have summed up the results of my analysis in tabular form:

Table 4 *Mandarin Morphemes -de₁, -de₂ and -de₃:
Derivation vs Inflection*

<i>Morphemes</i>	<i>de₁</i>	<i>de₂</i>	<i>de₃</i>
<i>Criteria</i>			
1	Derivation	Derivation	Derivation
2	Derivation	Inflection	Inflection
3	Derivation	Derivation	Inflection
4	Inflection	Inflection	Derivation
5	Inflection	Inflection	Inflection

Similar to the case of affixes vs clitics in the previous chapter, there is no clear-cut distinction between derivation and inflection either. It seems that *-de₁*

behaves more like a derivative affix while $-de_2$ and $-de_3$ more resemble inflectional affixes. Nevertheless, I prefer treating de_2 as a derivative affix rather than an inflectional one on the ground that it does not produce anything that could be considered a grammatical form. It does not even create so-called ‘complex forms’ of adjectives. They are made primarily through reduplication, composition or by adding suffixes other than $-de_2$ and $-de_3$ is added to these adjectives merely to complete them morphologically and/or to allow them enter certain syntactic relations. On the other hand, $-de_3$ is preferably analysed as an inflectional suffix. This is also supported by its edge inflection that excludes the possibility of derivation because verbs with affixes on the edge (i.e. on their objects) can hardly enter the lexicon as distinct units. The only problem is how to define the grammatical form it represents for it is far from usual in Indo-European languages for verbs, nouns and adjectives to share a common grammatical category. However, in other language families there are cases when a grammatical morpheme can belong to one generic category shared by different parts of speech. For instance, in Algonquian languages personal prefixes appear both on verbs and nouns attributing the action or state expressed by the verb to one of the grammatical persons or expressing the possession of a thing by a person, cf. Nishnaabemwin (Ojibwe), a language spoken in the Canadian province of Ontario:⁹⁸ *boodwe* ‘make a fire’, *nboodwe* ‘I am making a fire’, *gboodwe* ‘you (sg.) are making a fire’, *jiimaan* ‘boat’, *njiimaan(im)*⁹⁹ ‘my boat’, *gjiimaan(im)* ‘your (sg.) boat’.¹⁰⁰ In this context, it might be interesting to notice that as early as 1814, Joshua Marshman, the author of perhaps the earliest Sinitic grammar in English, wrote about adding of ‘the genitive particle’ to nouns, pronouns, adjectives and verbs.¹⁰¹

Conclusions

In the present paper I have proceeded from Zhū Déxī’s concept of the Mandarin homophone $-de$ 地 / 的 as a representation of three grammatical morphemes. I claim that all of these morphemes are affixes: the derivational

98 Examples are taken from J. Randolph Valentine, *Nishnaabemwin Reference Grammar* (Toronto: University of Toronto Press, 2001).

99 There is an optional ‘possessed theme suffix’ in parentheses.

100 Cf. personal pronouns in Nishnaabemwin: *nii - niim* ‘I’, *gii - giim* ‘you (sg.)’.

101 Marshman, *Elements of Chinese Grammar*, 222, 270–271, 378.

adverbial suffix *-de*₁, the derivational adjectival suffix *-de*₂ and the inflectional suffix of nominal adjectivals *-de*₃. My analysis implies that what I call tentatively 'nominal adjectivals' is in fact a grammatical form. I conceive this form as something similar to Indo-European participle or the genitive case; however, this issue still deserves more detailed investigation. Further comparisons with similar phenomena in other languages and dialects are needed as well as finer diachronic analyses.

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