

# Chinese cleft constructions: microparametric ‘lateral’ grammaticalization \*

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## Abstract

Historical-comparative analysis of Chinese cleft constructions shows that although all Chinese dialects use the copula to select and assign focus to its clausal complement headed by the nominal particle (*de* (的) in Mandarin, *ge* (個/嘅) in southern dialects), there are microvariations in that Mandarin *de* can either occur in sentence-final position (VOde) or as a verbal suffix (VdeO) whereas dialectal *ge* can only occur sentence-finally (VOge) and not elsewhere (\*VgeO). All this suggests that Mandarin *de* and dialectal *ge* are not identical, and indeed their etymological roots indicate that while both are nominal elements, *de* and its original form *di* (底) do not have inherent deixis or quantificational force whereas *ge* being derived from the general classifier *ge* (個) does, which pre-empts its reanalysis as a clausal element. The dialectal distribution of Chinese clefts allows us to refine Simpson and Wu’s ‘lateral’ grammaticalization.

## Key words

Chinese, clefts, copulas, nominalizers, syntax

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## 1. Introduction

Chinese cleft structures consist of the copula selecting a clausal complement headed by the nominal particle *de* in Mandarin or its dialectal equivalent *ge* in which there is a cleft bipartition of focus and presupposition, as schematized below (Lee 2005:133, Paul and Whitman 2008:430, Hole 2011:1710):

- (1)    Subject    COPULA    focus            presupposition    DE/GE<sup>1</sup>

There are dialectal microvariations here, since in northern varieties of Mandarin *de* can be affixed onto the verb in the embedded clause when it denotes past tense (2a-b), whereas *ge* is always sentence-final (2c-d):

- (2a)    我    是        昨天        買        票        的  
         wo shi    zuotian    mai    piao    de  
         I    COP    yesterday    buy    ticket    DE

- (2b)    我    是        昨天        買-的        票  
         wo shi    zuotian    mai-de    piao  
         I    COP    yesterday    buy-DE    ticket  
         ‘It was yesterday that I bought a ticket.’ (Mandarin) (Simpson & Wu 2002:169)

- (2c)    佢    係        琴日        買        書        嘅  
         kui hai    kamyat    maai    sue    ge  
         he    COP    yesterday    buy    book    GE

- (2d)    \*佢係    琴日        買-嘅        書  
         kui hai    kamyat    maai-ge    sue  
         he    COP    yesterday    buy-GE    book  
         ‘It was yesterday that he bought a book.’ (Cantonese)<sup>2</sup> (Lee and Yiu 1998:11)

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<sup>1</sup> The main difference between Chinese clefts and *it*-clefts is that although both involve the copula assigning focus to the relative clause, Chinese has prenominal relative clauses which leads to cleft bipartition within the relative clause as opposed to between the relativized noun and the relative clause as in *it*-clefts (Long 2013:436-440).

<sup>2</sup> The sentence-final nature of *ge* is widely attested in Chinese dialects (i-ii), despite some rare exceptions (iii):

- i)    伊    是        昨日        去    日本    個  
      i    si        zonie        qi    Zeben    ge  
      he    COP    yesterday    go    Japan    GE  
      ‘It was yesterday that he went to Japan.’ (Shanghainese) (Wu 2004:131)
- ii)    伊    是        昨日        去    日本    個  
      i    si        chahng        khi    jitpun    e  
      he    COP    yesterday    go    Japan    GE  
      ‘It was yesterday that he went to Japan.’ (Taiwanese) (Wu 2004:131)
- iii)    我    是        前年                到-個        北京  
      o    zi        dzieie                to-ke        peqin  
      I    COP    two.years.ago    arrive-GE    Beijing  
      ‘It was two years ago that I arrived at Beijing.’ (Xinhua dialect) (Wu 2005:279)

Simpson and Wu (S&W) argue influentially that the formation of Mandarin clefts is a case of ‘lateral’ grammaticalization (LG) where *de* is reanalyzed from being a sentence-final nominalizer (VDe) to a clausal particle (VdeO) which represents a ‘lateral’ reanalysis of *de* from the nominal (DP) to the clausal domain (TP). However, the general ban on the clause-medial positioning of *ge* (see footnote 2) belies the null hypothesis that *de* and *ge* are identical across Chinese dialects. This paper proposes to investigate the diachronic and synchronic relationship between *de* and *ge* in Chinese clefts: section 2 provides an empirical analysis and formal representation of Chinese clefts which are argued to be essentially copular constructions where the matrix copula verb assigns focus to its clausal complement headed by *de* or *ge*; section 3 examines the historical formation of Chinese clefts which are shown to be derived from nominalized clausal complements of the copula (Yap et al 2010) and the different etymologies of *de* and *ge* seem to account for their different distributions in Chinese clefts; section 4 discusses the theoretical implications of Chinese clefts for LG which seems to be parameterisable.

## 2. Chinese clefts (VDe/VdeO, VOge/\*VgeO)

It is well known that the two types of cleft structures have different empirical properties (Paul and Whitman 2008, Hole 2011), since in addition to the fact that verbal suffix *de* (VdeO) obligatorily marks past tense (2a-d), VDe and VOge permit a range of tense, aspect and mood (TAM) values (3a-b, d-e) and negation (3g-h), all of which are prohibited in VdeO (3c, f, i):

- (3a) 他是 明天 才 會 去 北京 的  
 ta shi mingtian cai hui qu Beijing de  
 he SHI tomorrow only.then will go Beijing DE  
 ‘It will be tomorrow that he will go to Beijing.’ (Mandarin) (S&W 2002:189)
- (3b) 我 係 要 去 美國 嘅  
 ngoh hai yiu hui meigwok ge  
 I COP will go America GE  
 ‘It is the case that I will go to America.’ (Cantonese) (Fung 2000:149)
- (3c) \*他是 明天 才 會 去-的 北京  
 ta shi mingtian cai hui qu-de Beijing  
 he SHI tomorrow only.then will go-DE Beijing  
 ‘It is only tomorrow that he will go to Beijing.’ (Mandarin) (S&W 2002:177)
- (3d) 張三 是 上 個 星期 去-了/過 北京 的  
 Zhangsan shi shang ge xingqi qu-le/guo Beijing de  
 Zhangsan COP last CL week go-ASP Beijing DE  
 ‘It was last week that he went to Beijing.’ (Mandarin) (Hole 2011:1713)
- (3e) 佢 係 打-緊 字 嘅  
 kui hai daa-gan ji ge  
 he COP hit-ASP word GE  
 ‘He is typing words.’ (Cantonese) (Fung 2000:151)

- (3f) 是 他 打破(\*-了/過) 的 杯子  
 shi ta dapo(-le/-guo) de beizi  
 COP he smash-ASP DE cup  
 'It was he who smashed the cup.' (Mandarin) (Paul and Whitman 2008:430)
- (3g) 我 是 從來 不 抽煙 的  
 wo shi conglai bu chouyan de  
 I COP ever NEG smoke DE  
 'I have never smoked.' (Mandarin) (Paul and Whitman 2008:422)
- (3h) 係 唔 關 你 事 嘅  
 hai ng gwaan nei si ge  
 COP NEG concern you matter GE  
 'It does *not* concern you.' (Cantonese) (Fung 2000:151)
- (3i) \*他 是 上 個 星期 不/沒 去-的 學校  
 ta shi shang ge xingqi bu/mei qu-de xuexiao  
 he COP last CL week NEG go-DE school  
 'It was last week that he did not go to school.' (Mandarin) (Paul and Whitman 2008:430)

Moreover, while VDe and VOge allow for narrow focus on the subject (4a-b) and the adjunct constituent (4d-e) closest to the copula as well as broad focus on the entire embedded clause with or without an overt subject (4g-h, j-k), VdeO only permits narrow focus (4c, f, i, l):

- (4a) 是 張三 寫 詩 的  
 shi Zhangsan xie shi de  
 COP Zhangsan write poetry DE  
 'It is Zhangsan who writes poems.' (Mandarin) (Hole 2011:1711)
- (4b) 係 我 叫 佢 俾-吓 先 嘅  
 hai ngoh giu kui tau-ha sin ge  
 COP I call him rest-ASP first GE  
 'It was I who told him to take a rest first.' (Cantonese) (Fung 2000:151)
- (4c) 是 張三 寫-的 詩  
 shi Zhangsan xie-de shi  
 COP Zhangsan write-DE poetry  
 'It was Zhangsan who wrote poetry.' (Mandarin) (Hole 2011:1710)
- (4d) 張三 是 用 毛筆 寫 詩 的  
 Zhangsan shi yong maobi xie shi de  
 Zhangsan COP use brush write poetry DE  
 'It is with a brush that Zhangsan writes poetry.' (Mandarin) (Hole 2011:1711)

- (4e) 張三 係 琴日 打 電報 嘅  
 Zoengsaam hai kamyat daa dinbou ge  
 Zhangsan COP yesterday hit telegram GE  
 'It was yesterday that Zhangsan sent a telegram.' (Cantonese) (Lee and Yiu 1998:9)
- (4f) 張三 是 用 毛筆 寫-的 詩  
 Zhangsan shi yong maobi xie-de shi  
 Zhangsan SHI use brush write-DE poetry  
 'It was with a brush that Zhangsan wrote poetry.' (Mandarin) (Hole 2011:1710)
- (4g) 張三 是 看到 王 小姐 的  
 Zhangsan shi kandao Wang xiaojie de  
 Zhangsan SHI see Wang miss DE  
 'It is the case that Zhang saw Miss Wang.' (Mandarin) (Hole 2011:1711)
- (4h) 我 係 踢 足球 嘅  
 ngoh hai tek jukkau ge  
 I COP play football GE  
 'It is the case that I play football.' (Cantonese) (Fung 2000:145)
- (4i) \*張三 是 寫-的 詩  
 Zhangsan shi xie-de shi  
 Zhangsan COP write-DE poem  
 'It is the case that Zhangsan wrote poems.' (Mandarin) (Hole 2011:1711)
- (4j) 是 希臘人 最 先 開始 釀 酒 的  
 shi Xilaren zui xian kaishi niang jiu de  
 COP Greek most first start brew wine DE  
 'It is the case that the Greeks were the first to brew wine.' (Mandarin) (Cheng 2008:253)
- (4k) 係 咁 都 得 嘅  
 hai gam dou dak ge  
 COP thus also possible GE  
 'It is the case that this is also possible.' (Cantonese) (Fung 2000:162)
- (4l) \*是 張三 寫-的 詩  
 shi Zhangsan xie-de shi  
 COP Zhangsan write-DE poetry  
 'It is the case that Zhangsan wrote poems.' (Mandarin) (Hole 2011:1711)

In conformity with the typological characteristics of clefts which often consist of copulas assigning focus to relative clauses (see footnote 1), the Chinese copula may be argued to assign focus to its complement ([u-Foc]) in which there may be left-dislocation in the form of A'-movement which derives cleft focus (cf Kiss 1998), and VOde/VOge and VdeO can be argued to be CP and TP respectively (Paul and Whitman 2008:445-448) in which given Minimality the

closest constituent is attracted to the focus projection on the left-periphery of *de* and *ge*,<sup>3</sup> and since phrase-final *de* and *ge* have scope over the embedded clause, they allow for all TAM values and negation in the embedded clause as well as A'-movement for either individual constituents or the entire clause itself which constitute narrow and broad focus (5a) whereas verbal affix *de* bans all other TAM values and negation and only permits A'-movement for individual constituents (5b):

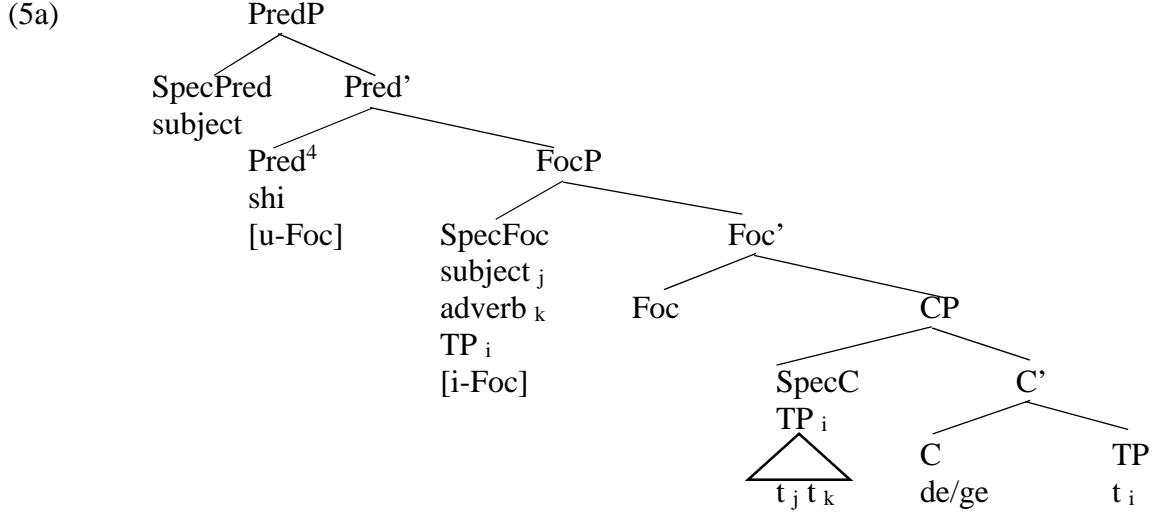


Figure 1: VODE/VOGE

<sup>3</sup> This is supported by the fact that cleft bipartition only exists in the presence of the clausal particle (i) (*shi-de* proper (Paul and Whitman 2008:414), whereas its omission yields informational focus by association (ii) (bare *shi* (Paul and Whitman 2008:415), which suggests that *de* and by extension *ge* hold the landing-site for A'-movement:

- (i) 他是 在北京 學 語言學 的, 不 是 在 上海 學 的  
 ta shi zai Beijing xue yuyanxue de bu shi zai Shanghai xue de  
 he COP at Beijing learn linguistics DE NEG COP at Shanghai learn DE  
 \*不 是 在 北京 學 法文 的  
 bu shi zai Beijing xue fawen de  
 NEG COP at Beijing learn French DE  
 'It was in Beijing that he studied linguistics, not in Shanghai \*(not French).' (Paul and Whitman 2008:415)
- (ii) 他是 在北京 學 語言學 不 是 在 上海 學 語言學  
 ta shi zai Beijing xue yuyanxue bu shi zai Shanghai xue yuyanxue  
 he COP at Beijing learn linguistics NEG COP at Shanghai learn linguistics  
 也 不 是 在 北京 學 法文  
 ye bu shi zai Beijing xue fawen  
 also NEG COP at Beijing learn French

'He studies linguistics at Beijing, not in Shanghai, and not French either.' (Paul and Whitman 2008:414)

<sup>4</sup> In representing copula *shi*, I adopt Bowers' (1993) hypothesis that copulas instantiate unique functional heads (Pred) with the subject in its specifier, which is arguably superior to the raising verb analysis which entails problems for the adjacency in cleft-focus assignment (Paul and Whitman 2008:437-438).

(5b)

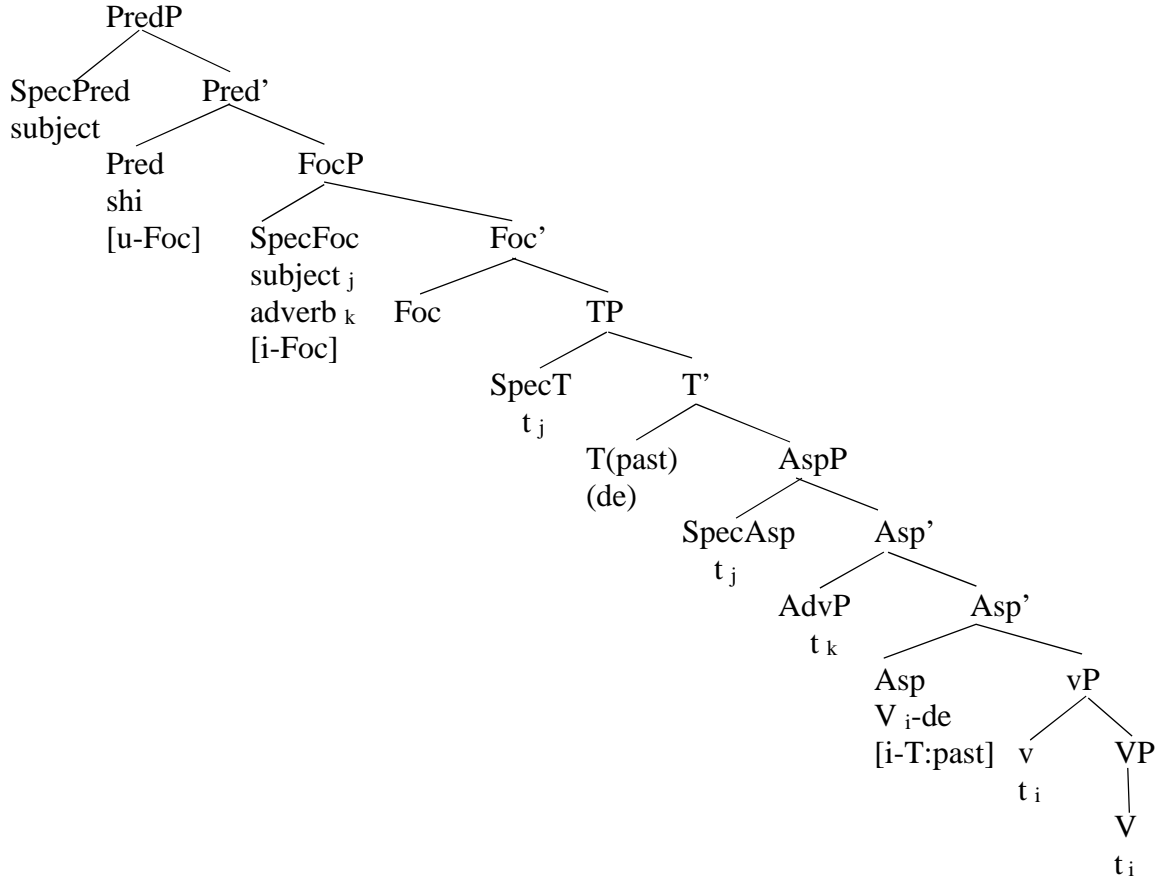


Figure 2: VdeO

Chinese clefts, then, are copular constructions whose clausal complements have different empirical properties due to the structural differences between sentence-final particles (VDe/VOge) and verbal suffixes (VdeO), which leads us to their diachronic formation.

### 3. Historical formation of Chinese clefts

Recent philological analyses point out that Chinese cleft constructions are reanalyzed from copular constructions in which the copula selects nominalized relative clauses headed by *de* and *ge* (Zhan 2012, Long 2013). While both *de* and *ge* are used as adnominalisers in Chinese, *de* is widely held to stem from the Medieval Chinese phrase-final nominaliser (n) *di* (底) (Liu 2008, cf Aldridge 2008) and *ge* is commonly argued to be derived from the classifier (CL) *ge* (Cao 1995) which can stand as a phrase-initial determiner and assign specificity (del Gobbo 1999).<sup>5</sup> *De* and *ge*, therefore, form different types of relative clauses when used as complements to the copula. VDe and VOge are regularly found in equative copular constructions where the clausal complement is reanalysable as a cleft in contrastive contexts (7a) or when the nominal complement is omitted (7b-c), which weakens their nominal character:

<sup>5</sup> The inherent specificity of *ge* may have to do with the fact that it is originally used as a quantifier for countable nouns in Classical Chinese and is hence inherently individualizing (Yap et al 2010, Bisang and Li 2012).

(7a) 非 是 菩薩 行藏, 此 是 俗門 作 底  
 fei shi pusa xingcang ci shi sumen zuo di  
 NEG COP divinity behaviour this COP laymen do DE  
 ‘This is not the behaviour of divinity; this is the doings of laymen (> ‘it was laymen who did this).’ (Dunhuang bianwenji 敦煌变文集)

(7b) 師 云: “ 人人 尽 有 底 衣 即 是。 ”  
 shi yun renren jin you di yi ji shi  
 teacher say everyone all have DE clothes then SHI  
 僧 云: “ 既 是 人人 尽 有 底, 用 被 作 什摩? ”  
 seng yun ji shi renren jin you di yong bi zuo shenme  
 monk say as COP everyone all have DE use garment do what  
 ‘The teacher says, ‘The clothes which everyone has it is then.’ The monk said, ‘If it is the clothes which everyone has (> if it is the case that everyone has it), what use is there for garments?’ (Zutangji 祖堂集)

(7c) 師 指 面-前 狗子 云: “ 明-明-个, 明-明-个。 ”  
 shi zhi mian-qian gouzi yun ming-ming-ge ming-ming-ge  
 teacher point face-LOC dog say bright-bright-GE bright-bright-GE  
 僧 便 問 師: “ 既 是 明-明-个, ”  
 seng bian wen shi ji shi ming-ming-ge  
 monk then ask teacher as COP bright-bright-GE  
 为 个 摩 头 在 里 许?”  
 wei ge mo tou zai li xu  
 for GE what head in inside within  
 ‘The teacher points at the dog in front and say, ‘Fair-skinned, fair-skinned.’ The monk then asks the teacher, ‘If it is the one that is fair-skinned (> if it is the case that it is fair-skinned), why is its head inside?’ (Zutangji 祖堂集)

Clause-medial *de* and *ge*, on the other hand, are found in copular constructions where the subject and the complement are not co-referential (Long 2013:425) and the contrast in deixis entails that *de* is attested with abstract and generic nouns and is hence reanalysable as a cleft denoting past tense due to the fact that the object is the result of the verb (7d) whereas *ge* tends to select specific and referential ones and its nominal character is hence retained (7e):

(7d) 娘 原 是 氣惱-上 起 的 病  
 niang yuan shi qinao-shang qi de bing  
 mother originally SHI angry-LOC contract DE illness  
 ‘As for my mother, it was originally the illness that was contracted by getting angry (> it was by getting angry that my mother contracted illness).’ (Jinping meici hua 金瓶梅詞話)

(7e) 則 是 茶坊-裡 見 個 粗-眉毛、 大-眼睛、 蹶鼻子、  
 ze shi chafang-li jian ge cu-meimao da-yanjing jue-bizi  
 then COP tea.lounge-LOC see GE thick-brow big-eye flat-nose



略绰-口 的 官人  
luechuo-kou de guanren  
sharp-mouth DE official

‘Then it was the case that in the lounge he saw a thick-browed, big-eyed, flat-nosed, sharp-mouthed official.’ (*Nansong Huaben Xuanji* 南宋話本選集)

The difference in deixis between *de* and *ge*, therefore, seems to account for the discrepancy between VdeO and \*VgeO in Chinese clefts, which has important implications for S&W’s LG.

#### 4. ‘Lateral’ grammaticalization: microparametric view

The reanalysis of Chinese *de* and *ge* in Chinese clefts shows that while both seem to conform to S&W’s LG hypothesis of a ‘lateral’ reanalysis from nominal to clausal, the inherent deixis of *ge* ([i-D]) pre-empts its reanalysis as a clausal element in clause-medial position as it selects definite and specific objects whereas *de* is reanalyzable in both clause-final and clause-medial positions due to its general lack of deixis, which shows structural correlations between the nominal and clausal domains ( $n/CL > C$ ,  $De > T/Asp$ ), which can be schematized thus:

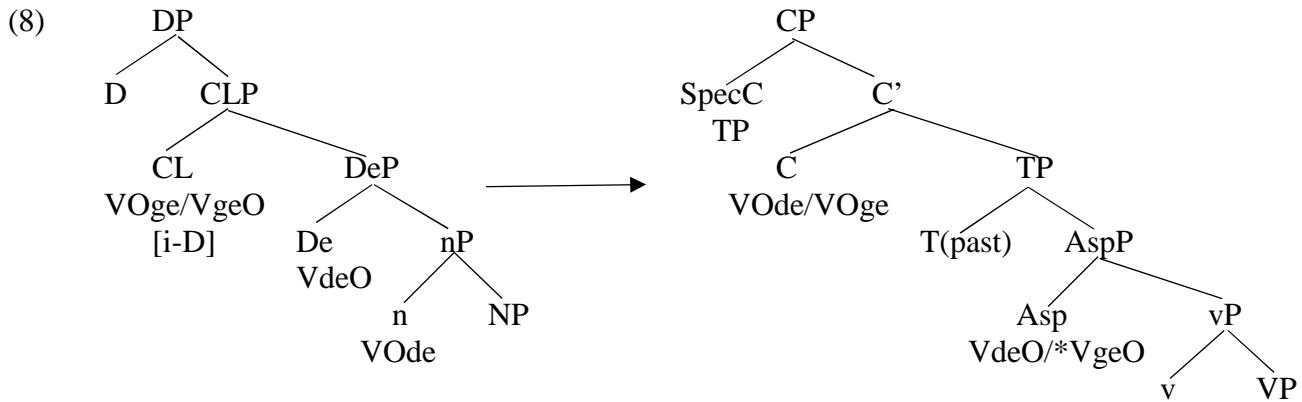


Figure 3: microparametric variation in ‘lateral’ grammaticalization

LG, therefore, can be parameterized according to the hierarchy of nominal elements, as higher elements (CL) cannot be as easily reanalyzed ‘laterally’ as lower ones (De/n).

#### References

- Aldridge, Edith. (2008) Old Chinese determiner zhe as a determiner. In Paola Crisma and Giuseppe Longobardi (eds.), *Historical Syntax and Linguistic Theory*. 233-248. Oxford: Oxford University Press.
- Bisang, Walter. and Li, XuPing (李旭平). (2012) Classifiers in Sinitic languages. *Lingua* 122. 335-355.
- Bowers, John. (2001) Predication. In Mark Baltin and Chris Collins (eds.), *The Handbook of Contemporary Syntactic Theory*. 293-333. Blackwell Publishers.

- Cao, GuangShun (曹廣順). (1995) Jindai Hanyu Yanjiu (近代漢語助詞) [Particles in Modern Chinese]. Shangwu Yin Shuguan (商務印書館).
- Cheng, Lisa. (2008) Deconstructing the *shi... de* construction. *Linguistic Review* 25. 235-266.
- Del Gobbo, Francesca. (1999) Nominal Phrases in Mandarin and Cantonese. *UCI Working Papers in Linguistics* 5. 11-32.
- Fung, Roxana. (2000): *Final Particles in Standard Cantonese: Semantic Extension and Pragmatic Inference*. Doctoral dissertation, Ohio State University.
- Hole, Daniel. (2011) The deconstruction of Chinese *shi...de* clefts revisited. *Lingua* 121. 1707-1733.
- Kiss, Katalin. (1998) Identificational focus versus informational focus. *Language* 74.2, 245-273.
- Lee, Hui-Chi. (李惠琦) (2005): *On Chinese Focus and Cleft Constructions*. Doctoral dissertation, Tsing Hua University of Taiwan.
- Lee, Hun-Tak (李俊德). and Yiu, Carine. (1998) *Final 'de' and 'ge3'*. Paper presented at the Annual Research Forum of the Linguistic Society of Hong Kong.
- Liu, Min-Zhi (劉敏芝). (2008) 漢語結構助詞的歷史演變研究 (Hanyu jiegou zhuci 'de' de lishi yanbian yanjiu) [Historical evolution of Chinese DE]. Beijing: Yuwen Press.
- Long, Hai-Ping (龍海平). (2013) On the formation of Mandarin VdeO. *Acta linguistica Hungarica* 60.4, 409-456.
- Paul, Waltraud. and Whitman, John. (2008) *Shi...de* focus clefts in Mandarin Chinese. *Linguistic Review* 25. 413-451.
- Simpson, Andrew. and Wu, Zoe. (2002) From D to T – determiner incorporation and the creation of tense. *Journal of East Asian Linguistics* 11. 169-202.
- Wu, YunJi (伍雲姬). (2005) *A Synchronic and Diachronic Study of the Grammar of the Chinese Xiang Dialects*. Berlin/New York: Mouton de Gruyter.
- Wu, Zoe. (2004): *Grammaticalization and Language Change in Chinese: A Formal View*. London/New York: Routledge Curzon.
- Yap, F., Choi, P-L and Cheung, K-S (2010): Delexicalizing *di*. In An van Linden, Jean-Christophe Verstraete, and Kristin Davidse (eds.), *Formal Evidence in Grammaticalization Research*. 63-91. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Zhan, F-Q (2012): *The structure and function of the Chinese copular construction*. Doctoral dissertation, Stanford University.