#### **ADVERBS**

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As is usual practice in the literature, the term *adverb* here refers both to adverbs *qua* part of speech (e.g. yě也 'also', zài 再'again', dàgài 大概 'probably', kěxī 可惜 'unfortunately') and to adjunct phrases, i.e. Noun Phrases (NPs), Prepositional Phrases (PPs) and Postpositional Phrases (PostPs) having an adverbial function (e.g. měi tiān 每天 'every day', *cóng zhèr* 從這兒 'from here', *gēn Āměi* 跟阿美 'with Amei', *yuánzé shàng* 原則上 'in principle'). Unless indicated otherwise, they are treated as one group.

Adverbs in Mandarin Chinese are excluded from postverbal positions, i.e. between the verb and its object as well as following the object (cf. (1c-d)). Note that this generalization is meant to hold for Mandarin only and might have to be amended for other Chinese languages such as Cantonese, where Sybesma (2012) reports one adverb, *sin1* 先 'first', in sentence-final position, i.e. <u>after</u> the object. Further systematic research of the distribution of adverbs in Chinese languages other than Mandarin is needed here, checking the working hypothesis that the position <u>between</u> verb and object always remains unaccessible for adverbs.

Adverbs in Mandarin can be divided into VP-level adverbs and sentence-level adverbs. (A simplified presentation is adopted here for reasons of space; cf. Cinque 1999, Ernst 2002 for more fine-grained classifications of adverbs.)

VP-level adverbs modify the event; they are confined to a preverbal position to the right of the subject (cf. (1a)) and excluded from the sentence-initial position (cf. (1b)):

- (1a) 他{也/常常/花言巧語地}騙同學
  - Tā {yĕ / chángcháng/ huāyánqiǎoyǔde} piàn tóngxué¹ 3sG also/ often / with.sweet.talk trick classmate 'He {also/often/with sweet talk} tricks his classmates.'
- (1b) \*{也/常常/花言巧語地} 他騙同學
  - \* { yĕ / chángcháng/ huāyánqiǎoyǔde } tā piàn tóngxué also/ often / with.sweet.talk 3SG trick classmate
- (1c) \*他騙{也/常常/花言巧語地}同學
  - \*Tā piàn {yĕ / chángcháng/ huāyánqiǎoyǔde } tóngxué 3SG trick also/ often / with.sweet.talk classmate
- (1d) \*他騙同學 {也/常常/花言巧語地}
  - \*Tā piàn tóngxué { yĕ / chángcháng/ huāyánqiǎoyǔde } 3SG trick class.mate also/ often / with.sweet.talk

Manner adverbs and adverbs referring to (the internal structure of the) event itself must occur to the right of auxiliary verbs and thereby form a subset within the VP-level adverbs, which in general precede auxiliaries:

<sup>&</sup>lt;sup>1</sup> The following abbreviations are used in glossing examples: CL classifier; PERF 'perfective aspect'; NEG negation; PART sentence-final particle; PL plural (e.g. 3PL = 3rd person plural); SG singular; SUB subordinator.

#### (2a) 他(\*認真地)應該認真地讀書

Tā (\*rènzhēnde) [ $_{AuxP}$  yīnggāi [ rènzhēnde [ $_{\nu P}$  dú shū]]] 3SG seriously must seriously study book 'He has to study seriously.'

#### (2b) 他還/已經(\*很專心地)能(\*還/已經)很專心地工作

Tā hái /yĭjīng (\*hěn zhuānxīnde) néng (\*hái /\*yĭjīng) hěn zhuānxīnde gōngzuò 3sG still/already very attentively can still/ already very attentively work 'She can still/already work very attentively.'

#### (3) 他明天(\*再)會再來

Tā míngtiān (\*zài) huì zài lái 3SG tomorrow again will again come 'He will come again tomorrow.'

These ordering constraints also illustrate that VP-level adverbs can differ with respect to how large a portion of the event they modifiy, i.e. have scope over. Given the general scope relations in Mandarin where the leftmost item is structurally higher than, i.e. has scope over, the item(s) to its right (cf. C.-T. James Huang 黃正德 1982, C.-C. Jane Tang 湯志貞 1990, 2001; Ernst 2002), a manner adverb (here huāyánqiǎoyǔde 'with sweet talk') bearing on the event itself must occur nearer to the verb than "higher" adverbs such as yě 'also' and chángcháng 'often' having scope over the event including eventual modifiers:

#### (4) 他(也)(\*花言巧語地)常常(也)花言巧語地騙同學

Tā (yĕ) (\*huāyánqiǎoyǔde) chángcháng (yĕ) huāyánqiǎoyǔde piàn tóngxué 3sG also with.sweet.talk often also with.sweet.talk trick classmate 'He (also) often (also) tricks his classmates with sweet talk.'

Note that yĕ 'also' may precede or follow chángcháng 'often', giving rise to slightly different interpretations reflecting the differences in scope, i.e. including or excluding chángcháng 'often' below 'also'.

In contrast to VP-level adverbs, sentence-level adverbs are not only acceptable in a sentence-internal preverbal position (preceding negation and auxiliaries), but also before the subject. More precisely, there are two groups, one liable to occur both to the right and to the left of the subject (cf. (5)), and one occurring sentence-initially only (cf. (6) -(7)).

# (5) {也許/居然/顯然/其實}他{也許/居然/顯然/其實}不了解我們的情況

{Yěxů / jūrán / xiǎnrán / qíshí } tā
perhaps/ unexpectedly/ obviously/ in.fact 3sG
{yěxǔ / jūrán / xiǎnrán / qíshí } bù liǎojiě wŏmen de qíngkuàng
perhaps/ unexpectedly / obviously/ in.fact NEG understand 1PL SUB situation
'{Perhaps/unexpectedly/obviously/ in.fact} he does not understand our situation.'

#### (6) 可惜他(\*可惜)不能來

Kěxī tā (\*kěxī) bù néng lái unfortunately 3SG unfortunately NEG can come 'A pity he cannot come.'

Note that among the adverbs qua words,  $k\check{e}x\bar{\imath}$  'unfortunately' seems so far to be the only one that is confined to the sentence-initial position and excluded from a sentence-internal position to the right of the subject. This is important because only a constituent to the left of  $k\check{e}x\bar{\imath}$  can be automatically assumed to occupy a sentence-external position, whereas the adverbs of the group illustrated in (5) - being acceptable in both sentence-external and sentence-internal position - cannot serve as such a diagnostic.

#### (7) 老實說我(\*老實說)沒想到這點

Lǎoshi shuō , wǒ (\*lǎoshi shuō ) méi xiǎngdào zhèi diǎn frankly speaking 1sG frankly speaking NEG think this point 'Frankly speaking, I haven't thought of this.'

The other expressions containing  $shu\bar{o}$  說 'speak' (e.g.  $hu\grave{a}n j\grave{u} hu\grave{a} shu\bar{o}$  換句話說 'in other words',  $b\check{i}r\acute{u} shu\bar{o}$  比如說 'for example') are likewise confined to the sentence-initial position. Typically, sentence-level adverbs do not affect the truth of the proposition; they rather express the speaker's evaluation of the state of affairs at hand.

Adjunct phrases (NPs, PPs and PostPs) cut across these two classes, because they can occur in all of the three adverb positions, i.e. sentence-initially, preceding and following auxiliaries, the different positions entailing interpretational differences. For example, when following the auxiliary, *mingtiān* 明天 'tomorrow' is used contrastively (*Tā huì mingtiān lái, bù shì hòutiān* 他會明天來不是後天 'He will come tomorrow, not the day after tomorrow.')

#### (8) (明天)他(明天)會(明天)來

([NP Míngtiān]) tā (míngtiān) huì (míngtiān) lái tomorrow 3SG tomorrow will tomorrow come 'He will come tomorrow.'

#### (9) (在圖書館)你(在圖書館)能(在圖書館)複印

([PP Zài túshūguăn]) nǐ (zài túshūguăn) néng (zài túshūguăn) fùyìn in library 2sG in library can in library xerox 'You can make photocopies in the library.'

#### (10) (除夕以前)我(除夕以前)要(除夕以前)回家

([PostP chúxī yǐqián]) wǒ (chúxī yǐqián) yào
New.Year's eve before 1SG New.Year's.Eve before need
(chúxī yǐqián) huí jiā
New.Year's.Eve before return home
'I need to go home before New Year's Eve.'

In English as well, adjunct NPs, PPs and PostPs (that way, with care, on Tuesday; ten years ago) behave alike and contrast in their distribution with adverbs (carefully, subsequently) (cf. Emonds 1987, Ng Siew Ai 1987, McCawley (1988); contra Larson 1985).

The different positions available for adunct phrases again reflect the scope relations in Mandarin, where the leftmost item has scope over the item(s) to its right, as witnessed by (11) where all the three adverb positions are occupied:

(11) 今年我們每天都必須六點起床 (C.-C. Jane Tang 2001: 218, (36)) Jīn-nián wŏmen měi tiān dōu bìxū liù diǎn qǐ chuáng this-year 1PL every day all must 6 o'clock get.up bed

'This year, we all need to get up at 6 o'clock every day.'

Against this background, postverbal Quantifier Phrases indicating duration or frequency (D/F-QPs), e.g. sān tiān 'three days' 三天, hěn cháng shíjiān 'a very long time' 很長時間, sì cì 'four times' 四次, liǎng huí 兩回 'twice' are better analyzed as "quasi-arguments" (cf. Paul 1988). This is because position-wise they pattern with objects and not with adjunct phrases, which are precisely excluded from postverbal position (cf. Y.-H. Audrey Li 李艳惠 1990):

(12) 他{每天/在圖書館}休息兩回/{\*每天/\*在圖書館}

Tā {měi tiān / zài túshūguăn } xiūxi liǎng huí {\*měi tiān /\* zài túshūguăn } 3sg every day / at library rest 2 time every day / at library 'He takes a rest twice every day/at the library.'

While not being subcategorized for by the verb, D/F-QPs entertain a close relationship with the verb because they depend on its aktionsart, again unlike adjunct phrases. For example, telic verbs are incompatible with a QP indicating the duration of the event.

(13) 這個問題他可能會{考慮/\*解決}很長時間

Zhèi ge wèntí , tā kěnéng huì {kǎolǜ /\*jiějué} [hěn cháng shíjiān]. this CL problem 3SG perhaps will think.over/ solve very long time 'This problem, he will probably {think it over/\*solve it} for quite a long time.'

Furthermore, like arguments and unlike adjunct phrases, D/F-QPs need to be case-licensed, as witnessed by their impossibility of co-occurring with an object in postverbal position (cf. C.-T. James Huang 1982; Y.-H. Audrey Li 1990; *contra* Huang, Li and Li's (2009: 92) analysis of D/F-QPs as V-bar adjuncts; cf. Ernst 1996 for further discussion and references).

(14a)\*他考慮了這個問題很長時間

\*Tā kǎolǜ -le [zhèi ge wèntí] [hěn cháng shíjiān] 3SG think.over-PERF this CL problem very long time

(14b) 他考慮了這個問題 / 很長時間

Tā kǎolù -le [zhèi ge wèntí ] /[hěn cháng shíjiān] 3sG think.over-PERF this CL problem / very long time 'She thought the problem over/She thought for a long time.'

Finally, let us turn to the so-called *descriptive complement 'de* 得+ XP' following the verb and usually analyzed as a postverbal manner adverb (cf. among others, Ernst 2002 and references therein).

(15) 他猜得對/\*錯

Tā cāi de duì /\*cuò 3SG guess DE right/ wrong 'She guessed right/wrong.'

#### (16) 他回答得很自然/\*天然

Tā huídá de hěn zìrán /\*tiānrán 3SG answer DE very natural/ natural 'He answered very naturally.'

Though the best *translational* equivalent is indeed a manner adverb, this cannot be the correct analysis. Because only predicative adjectives (e.g. *duì* 對 'right') are acceptable following *de* 得, to the exclusion of non-predicative adjectives (e.g. *cuò* 錯 'wrong', *tiānrán* 天然'natural') and verbs. (For predicative vs. non-predicative adjectives, cf. Paul 2005, 2010 and references therein.)

## (17) 他的看法{不對/很自然}/{\*錯/\*天然}

Tā de kànfă {bù duì / hěn zìrán }/ {\*cuò /\*tiānrán} 3sg sub opinion NEG right/ very natural / wrong/ natural 'His point of view is not correct/ is natural / is wrong.'

This constraint can best be captured by analysing the adjectival phrase (AP) as a complement selected by the head de.

The fact that unlike adverbs (cf. (20)), this AP can in turn be negated and questioned in the A- $b\dot{u}$ -A form (cf. C.-T. James Huang 1988, Y.-H. Audrey Li 1990:45, among others) and be modified by adverbs provides further evidence for its predicate status and against adverbial status:

#### (18) 他說得不清楚/比你更清楚

 $T\bar{a}$  shuō [ de [ bù qīngchǔ ]] / [AP [PP bǐ nǐ ] [AP gèng qīngchǔ ]]] 3SG speak DE NEG clear / compared.to 2SG more clear 'He doesn't speak clearly.'/ 'He speaks even more clearly than you.'

#### (19) 他唱得大聲不大聲?

Ta chàng de [dàshēng bù dàshēng]? 3SG sing DE loud NEG loud 'Does she sing loudly?'

#### (20) \*他{也/常常/花言巧語地} 不{也常常/花言巧語地}騙同學?

Tā {yĕ / chángcháng/ huāyánqiǎoyǔde} bù {yĕ / chángcháng/ huāyánqiǎoyǔde} 3SG also/ often / with.sweet.talk NEG also/ often / with.sweet.talk piàn tóngxué? trick classmate

Accordingly, the AP is a predicative projection representing a subevent that enters into the composition of a complex predicate with the matrix verb: 'V de AP'. This accounts for the strict manner interpretation observed for postverbal 'de AP' (cf. Ernst 1994: 48), in contrast to preverbal adverbs also allowing for a subject-oriented reading. In fact, C.-T. James Huang (1992) already proposed a complex predicate analysis for 'V de AP' (although with concerns different from those presented here), but apparently this was not taken up by subsequent studies of adverbs that still allow for adverbs in postverbal position.

To summarize, adverbs in Mandarin exclusively occur in preverbal position, postverbal D/F-QPs and the so-called descriptive complement turning out not to be adverbs.

In other words, there is no right adjunction of adverbs in Mandarin (*contra* Ernst 2002). Note that even if D/F-QPs and the '*de* AP' were analyzed as adverbs, an adjunction approach would remain implausible, given the unacceptability of their co-occurrence:

# (21) \*他 猜得對兩次 \*Tā cāi de duì [liǎng-cì] 3SG guess DE right 3-time (Intended meaning: 'He answered correctly twice.')

By contrast, in preverbal position several adverbs can co-occur, a situation in principle compatible with an adjunction approach. Adjunction to  $\nu$ , however, as proposed by Huang, Li and Li (2009: 100), must be excluded, given (5) and (8) - (10) above, where the adverbs precede negation and auxiliaries, i.e. projections larger than  $\nu$ P.

Showing exclusively preverbal adverbs, Mandarin is thus compatible with the two major proposals for adverbs, viz. (left) adjunction and Cinque's (1999) hierarchy of functional projections each hosting a different adverb type. (For a critical appraisal of Cinque's (1999) model as applied to Chinese, cf. C.-C. Jane Tang 2001.)

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