On AP-地 Manner Adverbs in Mandarin

Richard Larson (Stony Brook University)

Li and Thompson (1981) classify Mandarin adverbs as movable vs. non-movable. Temporal jintian ‘today’ is movable, occurring both S-medially and S-initially (1a,b). Temporal yiijing ‘already’ is non-movable, occurring only S-medially (2a,b):

1. Ta jintian zou le. (2a) Ta yiijing zou le.
   3sg today leave ASP 3sg already leave ASP
   ‘S/he left today’ ‘S/he already left’

2. Jintian ta zou le. ’Yijing ta zou le.

Mandarin manner adverbs also include movable/non-movable forms. Dasheng ‘loudly’ (lit. ‘big voice’) is movable (3a,b). Qiaoqiaode ‘quietly’ is non-movable (4a,b).

3. (a) Ta zongshi hen dasheng gen bieren jianghua.
   3sg always very loud to others talk
   ‘S/he always talks to others loudly.’
   (b) Ta zongshi gen bieren jianghua hen dasheng.

4. (a) Ta zongshi qiaoqiaode gen bieren jianghua.
   3sg always quietly DE to others talk
   ‘S/he always talks to others quietly.’
   (b) Ta zongshi gen bieren jianghua qiaoqiaode.

Qiaoqiaode derives from the AP qiao ‘quiet’ by suffixation of 地 ‘DE’; compare English quietly/quiet. Interestingly, Mandarin manner adverbs sharing this derivation also share the distribution. AP-地 adverbs occur only S-medially (5)-(8):

5. (a) Ta yanli-de zebei le wo. (6) a. Lisi gaoxing-de bangzhu le wo.
   3sg stern-DE reproach ASP 1 Lisi glad-DE help ASP 1
   ‘He reproached me sternly.’ ‘Lisi helped me gladly.’
   (b) Ta zebei le wo yanli-de.
   (b) Lisi bangzhu le gaoxing-de.

6. (a) Ta yinggai kuaikuai-de zuowan zuoyo.
   3sg should quick-DE finish homework
   ‘S/he should finish her/his homework quickly.’
   (b) Ta yinggai zuowan zuoyo kuaikuai-de.

7. (a) Ni yao hen xiaoxin(de) kai che.
   You should very careful-DE drive car
   ‘You should drive your car very carefully’
   (b) Ni yao kai che hen xiaoxin-de.

In this talk I:

- review the problem raised by AP-地 adverbs for current theories of adverbial modification.

- argue that manner adverbs have a uniform low attachment in complement position and hence that S-medial position must be derived,

- suggest that movement follows from adverbial DE (地) being a concordializing element, similar to nominal DE (地) as analyzed by Larson (2009).

1.0 The Puzzle of AP-地

AP-地 distribution is puzzling under the two most popular accounts of modifier syntax.

1.1 AP-地 Adverbs as Adjuncts

Adverbs are usually analyzed as V-projection adjuncts (Ernst 2002 a.m.o.). Huang, Li and Li (2009) adopt this view for Chinese manner Advs, giving structure (10a) for (8a), where hen dasheng (identified as AP) left-joins to V′. Presumably the same analysis applies to (9b); hen dasheng right-joins to V′ (10b):

9. a. Ta zongshi hen dasheng chang minge, he always very loud sing folk song
   ‘He always sings folk songs loudly.’
   b. Ta zongshi chang minge hen dasheng.

10. (a) Left Adjunction to V′

    (b) Right Adjunction to V′

   Ceteris paribus we expect the same distribution for manner AP qiaoqiaode ‘quietly’. But although qiaoqiaode is allowed on the left (11a), it is excluded on the right (11b).

11. (a) Left Adjunction to V′

    (b) Right Adjunction to V′

   This asymmetry is unexplained on the adjunction account.

1.2 AP-地 Adverbs as Functional Heads

AP-地 Advs are also puzzling on Cinque’s (1999) hierarchy of functional projections (see also Laenzlinger 1996). Consider (11a) above. On a C-style account, jintian and yiijing might be analyzed as heads of temporal location phrase (TLP) and temporal priority phrase (TPP), resp. projected between vP and TP (12a,b):

12. a. Ta jintian yiijing zou le.
   3sg today already leave ASP
   ‘He/she already left today’
This can capture: (a) fixed order of jintian and yijing, and (b) their differing “mobility”.

Suppose yijing obligatorily raises the specifier of its complement (ta), but jintian makes raising an option. This correctly predicts (13a,b) and excludes (13c):

13. a. [TL’ jintian [TP’ ta yijing [VP to zou le]]] Obligatory raising by yijing
   b. [TL’ ta jintian [TP’ yijing [VP to zou le]]] Optional raising by yijing
   c. *[TL’ jintian [TP’ yijing [VP ta zou le]]] *Non-raising

C’s theory predicts: **adverbs of the same category/semantic class should pattern together. Correct for TLPs;** mingtian ‘tomorrow’, zuotian ‘yesterday’, jintian ‘this year’, qunian ‘last year’, mingnian ‘next year’, etc. all pattern identically to jintian.

What about Chinese manner Advs? Dasheng occurs S-medially/S-finally. Under C’s approach, we might analyze this by requiring dasheng to raise either the specifier of its complement (ta) or the whole complement itself (ta chang minge):

14.a. Ta **hen dasheng** chang minge.
  ‘He very loud sings folk song.’
  a. Ta chang minge **hen dasheng**.
  b. Ta chang minge **hen dasheng**.
  c. [ManP Man’]

But **marked manner Advs behave differently, hence unlike TL. Man cannot be analyzed uniformly. **marked Advs are blocked S-finally (15a,b). So they must be required to raise, but allowed to raise only their complement specifiers (15c).

15.a. Ta zongshi **qiaoqiao-de** gen bieren jianghua.
  ‘She always talks to others quietly.’
  b. *Ta zongshi gen bieren jianghua **qiaoqiao-de**.

**2.0 The Position of Manner Advs**

Larson (2004, 2014): manner Advs project neither as V-adjuncts nor heads/specs of functional cats, but rather as **low V complements.** This seems required for (16a), where Adv is apparently selected by V (word/phrase) (16b):

   b. [NP John [V’]
      I word]

But evidence exists for uniform low position, even when Adv isn’t required.

**2.1 Manner Adv incorporation**

Rivero (1992) notes Mod Greek regularly allows incorporation of manner (& directional) Adv. (17a,b) shows incorporation with férète ‘behave’, which selects manner Adv. (18a,b) shows incorporation with vrás ‘boil’, which doesn’t. See also (19).

17. a. I Maria férète kaka stin adelfi tis
   DEF Mary behaves **badly to** sister hers
   ‘Mary behaves badly to her sister’
   b. I Maria kakóférète stin adelfi tis
   DEF Mary **badly+behaves to** sister hers
18. a. To fagitó tha vrásí
   The food **FUT** boil
   ‘The food will boil’
   b. To fagitó tha vrásí sigá
   ‘The food will boil **slowly**’
   c. To fagitó tha sigóvrásí
Manner Adv

2.2.1 Condoravdi (1989)

Middles involve structured, generic event quantification.

2.2.2 Mapping to Syntax

Diesz’s Mapping Hypothesis (1992) matches parts of quantification to syntactic position; high material (IP) goes to Q-restriction; low material (VP) goes to Q-scope. Larson (2004) adopts the following variant, following Chaeiria (1995):

Mapping Hypothesis: Lowest material from VP is mapped to the nuclear scope.

The residue is mapped into a restrictive clause.

Under MH, Condoravdi’s semantic proposal implies a low position for manner AdvPs in generics, including middles:

2.3.1 Mandarin Generics

Mandarin speakers report a postverbal preference for AP/Adv in generics.

3.0.1 Mandarin Adverb Position in Mandarin Generics

Mandarin speakers report a postverbal preference for AP/Adv in generics.
b. Ta zoulu hen xiaosheng.
   3sg walk very little-voice
   ‘She (always) walks very quietly’

(27a) Lisi kuaikuaide zoulu.
   ‘Lisi is walking quickly’/?? ‘Lisi walks quickly’

b. Zhangsan qiaoqiao-de shuo hua.
   ‘Zhangsan is speaking quietly’/?? ‘Zhangsan speaks quietly’

Read as generics something seems to be “missing” in (27a,b).

These data are straightforward under the proposals above. (26a-c) allow a low position for AP, as expected under MH (28). But (27a,b) are problematic (29):

(28)

(29)

(30) a. Zhangsan zixi-de zuo shi.
   Zhangsan meticulous-de do work
   ‘Zhangsan does work meticulously’

b. Zhe-ge mianbao hen hao/rongyi qie.
   this bread very good/easy cut
   ‘This bread cuts well/easily.

(31)a. Lisi changchang/zongshi kuaikuaide zou guo dating.
   Lisi always quick-de walk through hallway
   ‘Lisi always walks through the hallway quickly’

b. Lisi changchang/zongshi qiaoqiao-de shuo hua.
   Lisi always quiet-de speak word.
   ‘Lisi always speaks quietly.’

But now our MH problem returns. Again the mapping comes out backwards (32):

(32)

What’s going on?

4.0 Mandarin AP-地 as Concordial

Suppose Mandarin manner Advs project uniformly into low position (28), but AP-地 raises obligatorily to vP edge. MH can be satisfied by interpreting the low copy (33).

(33)
This view inverts Li and Thompson (1981). Rather than being non-moveable, AP-地 must raise S-medially (cf. ‘Li zongshi shuo hua qiaoqiao-de’).

Why is movement required with AP-地?

4.1 The Category of Moveable Manner Adverbials

Li (1985, 1990) suggests surface postV position is open only to nominal adverbials. Despite AP label by Huang, Li and Li (2009), moveable dasheng and xiaosheng are plausibly nominal (“big voice”/little voice”) (34a). Similarly for moveable xiaoxin (= xiao (‘small’) + xin (‘heart’) ‘care’ (34b), qinlao ‘diligence’ (32c), naixin (= nai (‘endure’) + xin (‘heart’) ‘patiently’, (34d), xinku (= xin(‘spice’) + ku(‘bitterness’) ‘hard’ (34e) and zhencheng (= zhen (‘true’) + cheng (‘honesty’) ‘sincerely’ (34f):

(34) a. Ta chang minge  hen dasheng.
   He sings folk songs very loudly
   ‘He sings folk songs loudly’
   he drive very carefully
   ‘He drives carefully’/‘He drives with care’
   c. Ta zuoshi hen qinfen.
   He answer question very patiently
   ‘He answers questions patiently’/‘He answers questions with patience’
   e. Ta gongzuo hen xinku.
   he work very hard
   ‘He works with effort’
   f. Ta duidai bieren hen zhencheng.
   He treat others very sincerely
   ‘He treats others sincerely’/‘He treats others with sincerity’

Nominal manner adverbs always allow, and usually prefer/require de (地) S-medially. But like other -地-marked adverbs they are forbidden S-finally. Cf. (34a-f) and (35a-f):

(35) a. Ta dasheng ??(-de) chang minge/chang minge dasheng(-de).
   b. Ta xiaoxin ??(-de) kaiche/ kaiche xiaoxin(-de).
   c. Ta qinlao ??(-de) zuoshi/zuoshi qinlao(-de).
   d. Ta naixin ??(-de) huida wenti/ huida wenti hen naixin(-de).
   e. Ta xinku ??(-de) gongzuo/ gongzuo xinku(-de).
   f. Ta zhencheng ??(-de) duidai bieren/ zhencheng(-de).

Thus de (地) enables pre-V occurrence, but inhibits post-V occurrence. Li (1985, 1990) proposes nominal adverbs are case-licenced in post-V position. If this is correct, de’s effect is plausibly related to case.

4.2 Assignment vs. Concord

Both Ns and As inflect for case in many Lqs. Traditional Grammar: Ns are assigned case; As get case by concord/agreement.

Proposal: Suffixing (地) creates a “cordial”/adjectival element — one requiring case, but able to receive it only by agreement. This compels raising to a position between a case probe (e.g., T) and a goal (e.g., Lish).

4.3 Case Features & Agreement (Pesetsky and Torrego 2007)

Features come in four varieties, according to whether they are valued/unvalued, interpretable/uninterpretable (37).

(37) | INTERPRETABLE | UNINTERPRETABLE |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VALUED</td>
<td>iFv</td>
</tr>
<tr>
<td>UNVALUED</td>
<td>IF</td>
</tr>
</tbody>
</table>

Only features both interpretable & valued are legible at the interface. (39a-d) will be legible, but (40a-e) will not:

(39) a. iFv[ ]       b. IF[ ... uFv[ ]
   c. IF[ ... uFv[ ]
   d. IF[ ... uFv[ ]
   e. IF[ ... uFv[ ]

Thus: Interpretable F will need to agree with valued F. Valued F will need to agree with interpretable F.

4.4 Mandarin Manner Adverbs

(41) [v] T [vP ta [vP jiang-hua [vP dasheng]]]]]

(42) [vP α ] ⇔ [vP α地 ]
If this is correct, then “concordiality” operates in both Mandarin DPs and TPs.

4.5 Mandarin Nominal adverbs

Larson (2009) proposes nominal adverbs (46) is also a concordializing element:

(46) Ta mai le piaoliang de yifu
3SG buy PRETTY DE clothes
“He bought some attractive clothes”

If this is correct, then “concordiality” operates in both Mandarin DPs and TPs.

5.0 Summary

- Mandarin exhibits manner adverbs that can occur post-V (moveable), and manner adverbs that must occur pre-V (non-moveable).
- This distribution is mysterious under current theories of adverbial syntax.
- There is distributional evidence (incorporation) and semantic evidence (generics-MH) for a uniform low position for manner adverbials.
- If so, pre-V position for manner adverb in Mandarin must be derived.
- Why can nominal manner adverbs in Mandarin remain in situ?
- Why must 傢-marked manner adverbs raise?
- Proposal here (following Y.H. Li): This is a case fact.
- Nominal manner adverbs can remain in situ because they are valued for case.
- 地-marked manner adverbs must raise to agreement position because they are unvalued for case.
- Attachment of 地 seems to create a “concordial” phrase (one unvalued for case).
- 地 in the TP domain appears to function similarly to the in the DP domain.

Appendix: Potential counterexamples to the claim that postV manner adverbials are uniformly nominal (ZHANG Chong (pc.))

i. a. Ta zuoshi hen jinshen. he work very cautious
> jin(‘cautious’)shen(‘cautious’) A+A
b. Ta jinshen-de zuoshi

ii. a. Ta manludi tiaozhan hen yonggan. he face challenges very courageous
> yong(‘courage’)gan(‘dare’) A+V
b. Ta yonggan-de manludi tiaozhan.

iii. a. Ta xiezi hen liaocao. he write very messily
> liao(‘messy’)cao(‘messy’) A+A
b. Ta liaocao-de xiezi.

Thanks to: ZHANG Chong, KAO Sophia, LIU Yaobin, SHU Chi-hsiang, LU Yu-an !!

References