Demonstratives and the Restrictive/Appositive Distinction in Mandarin Relative Clauses

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Introduction

Mandarin relative clauses (RC) can co-occur with demonstratives (Dem):

<RC> Dem Num CL <RC> N

- pre-Dem position:

  (1) [$_{RC}$ ying-le   bisai de] zhe/na   (yi) wei xuesheng
          win-PERF game DE this/that one CL student

- post-Dem position:

  (2) zhe/na   (yi) wei [$_{RC}$ ying-le   bisai de] xuesheng
          this/that one CL   win-PERF game DE student

Question: 'this/that student (,) who won the game' (restrictive or appositive)?

Introduction

Different conclusions were reached about the correlation (Chao 1968; Huang 1982; Lin 2003; Constant 2011; Lin&Tsai 2014; Del Gobbo 2010, 2017 a.o.)

	Chao, Huang	Lv, Tsai	Lin	Constant
pre-Dem RC	restrictive	appositive	restrictive	restrictive
post-Dem RC	appositive	restrictive	restrictive	restrictive/appositive

→ The restrictive/appositive (R/A) distinction correlates with RC's pre/post-Dem position.

Why is it so difficult to diagnose the distinction?

Introduction

Tests for R/A distinction in English (Jackendoff 1977; Cinque 2008; Potts 2003; Del Gobbo 2003, a.o.):

- QP anchors: *appositive; restrictive

    (3) a. *John congratulated every student, who won the game.
        b. John congratulated every student that won the game.

- Non-DP anchors: appositive; *restrictive

    (4) a. Mary is **honest**, which John will never be.
        b. *Mary is **honest** that John will never be.

Introduction

Most of these tests, however, are for **non-integrated** appositives (Cinque 2008), while Mandarin appositives are **integrated** (Gobbo 2010, 2017).

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Tests which tease apart integrated appositives and restrictives in Mandarin (Constant 2011; Lin&Tsai 2014; Del Gobbo 2010, 2017):

- Nondeniability
- Antibackgrounding
- Root-level adverbs

Introduction

This talk:

- Different uses of demonstrative are ignored in previous research, and they interact with R/A distinction
- No one-to-one correspondence between pre/post-Dem position and R/A distinction

Outline

1. Two uses of demonstrative

2. The central claim and arguments
   - The restrictive/appositive distinction of RCs correlates with the uses of Dem
   - Applying three valid tests

3. Analysis

4. Conclusions

Different uses of Dem are not distinguished

At least two uses of demonstrative:

- Deictic use (Dissel 1999; Roberts 2003)

  (5) ☞ zhe/na   wei xuesheng hen xingyun
          this/that CL student   very lucky
      'This/that student is very lucky'

Different uses of Dem are not distinguished

At least two uses of demonstrative:

- Deictic use (Dissel 1999; Roberts 2003)

  (5) ☞ zhe/na   wei xuesheng hen xingyun
          this/that CL student   very lucky
       'This/that student is very lucky'

- Anaphoric use (Wolter 2004; Jenks 2018)

  (6) you yi wei xuesheng ying-le   bisai. zhe/na   wei xuesheng
       have one CL student   win-PERF game this/that CL student
       hen xingyun
       very lucky
       '[A student]$_i$ won the game. [This/that student]$_i$ was very lucky'

Outline

- $<\text{RC}_{\textbf{*restrictive}/appositive}>$ $\text{Dem}_{deictic}$ CL $<\text{RC}_{restrictive/appositive}>$ N
- $<\text{RC}_{restrictive/appositive}>$ $\text{Dem}_{anaphoric}$ CL $<\text{RC}_{restrictive/appositive}>$ N

Outline

Test 1: Nondeniability

Appositives as conventional implicatures are not deniable with epistemic riders (Constant 2011; Potts 2005).

(7) a. #If John did win, then John, who won the game, was lucky.
     b. If a student did win, then the student that won the game was lucky.

If the result is # → RC can only be appositive;
If the result is *ok* → RC can be restrictive.

Test 1: Nondeniability

- Deictic use of Dem

(8) ruguo ☞ zhe wei xuesheng queshi ying-le, ...
     if   this CL student   indeed win-PERF
     'If this student indeed won,...

   a. #[_RC_ ying-le   bisai de] ☞ zhe wei xuesheng hen xingyun
            win-PERF game DE   this CL student   very lucky
      'this student, who won the game, was very lucky'

   b. ☞ zhe wei [_RC_ ying-le   bisai de] xuesheng hen xingyun
          this CL   win-PERF game DE student   very lucky
      'this student who won the game, was very lucky'

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      'this student, who won the game, was very lucky'

    b. ☞ zhe wei [$_{RC}$ ying-le   bisai de] xuesheng hen xingyun
          this CL   win-PERF game DE student   very lucky
      'this student who won the game, was very lucky'

$\rightarrow$ This shows:

	Deictic Dem
pre-Dem RC	can only be appositive
post-Dem RC	can be restrictive

Test 1: Nondeniability

- Anaphoric use of Dem

(9) ruguo you yi wei xuesheng queshi ying-le, ...
    if have one CL student indeed win-PERF
    'If a student indeed won,...

   a. [_RC_ ying-le bisai de] zhe wei xuesheng hen xingyun
          win-PERF game DE this CL student very lucky

   b. zhe wei [_RC_ ying-le bisai de] xuesheng hen xingyun
      this CL win-PERF game DE student very lucky
      this student who won the game, was very lucky'

Test 1: Nondeniability

- Anaphoric use of Dem

(9) ruguo you yi wei xuesheng queshi ying-le, ...
     if   have one CL student   indeed win-PERF
     'If a student indeed won,...

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    b. zhe wei [$_{RC}$ ying-le   bisai de] xuesheng hen xingyun
        this CL   win-PERF game DE student   very lucky
        this student who won the game, was very lucky'

$\rightarrow$ This shows:

	Anaphoric Dem
pre-Dem RC	can be restrictive
post-Dem RC	can be restrictive

Test 2: Antibackgrounding

The content of appositives cannot be backgrounded (Potts 2005) while the content of restrictives are often presupposed (Comrie 1981; Constant 2011).

(10) a. Bill loves reading. #When reporters interview Bill, who loves reading, he often talks about his books.

b. A student loves reading. When reporters interview the student that loves reading, he often talks about his books.

If the result is # → RC can only be appositive;
If the result is *ok* → RC can be restrictive.

Test 2: Antibackgrounding

- Deictic use of Dem

(11) ☞ zhe wei xuesheng ai   dushu, ... zuotian   mai-le   xuduo shu
         this CL student   love reading ... yesterday buy-PERF many book
      'This student loves reading. ...... bought many books yesterday'

  a. #[$_{RC}$ ai   dushu   de] ☞ zhe wei xuesheng
            love reading DE   this CL student
      'This student, who loves reading'

  b. ☞ zhe wei [$_{RC}$ ai   dushu   de] xuesheng
         this CL   love reading DE student
      'This student who loves reading'

Test 2: Antibackgrounding

- Deictic use of Dem

(11) ☞ zhe wei xuesheng ai dushu, ... zuotian mai-le xuduo shu
       this CL student love reading ... yesterday buy-PERF many book
    'This student loves reading. ...... bought many books yesterday'

   a. #[$_{RC}$ ai dushu de] ☞ zhe wei xuesheng
         love reading DE this CL student
     'This student, who loves reading'

   b. ☞ zhe wei [$_{RC}$ ai dushu de] xuesheng
       this CL love reading DE student
     'This student who loves reading'

→ This shows:

	Deictic Dem
pre-Dem RC	can only be appositive
post-Dem RC	can be restrictive

Test 2: Antibackgrounding

- Anaphoric use of Dem

(12) mou wei xuesheng ai   dushu, ... zuotian   mai-le   xuduo shu
      some CL student   love reading .... yesterday buy-PERF many book
      'Some student loves reading. ...... bought many books yesterday.'

    a. [$_{RC}$ ai   dushu   de] zhe wei xuesheng
           love reading DE this CL student

    b. zhe wei [$_{RC}$ ai   dushu   de] xuesheng
       this CL   love reading DE student
       'This student who loves reading'

Test 2: Antibackgrounding

- Anaphoric use of Dem

(12) mou wei xuesheng ai   dushu, ... zuotian   mai-le   xuduo shu
      some CL student   love reading .... yesterday buy-PERF many book
      'Some student loves reading. ...... bought many books yesterday.'

  a. [$_{RC}$ ai   dushu   de] zhe wei xuesheng
          love reading DE this CL student

  b. zhe wei [$_{RC}$ ai   dushu   de] xuesheng
     this CL   love reading DE student
     'This student who loves reading'

$\rightarrow$ This shows:

	Anaphoric Dem
pre-Dem RC	can be restrictive
post-Dem RC	can be restrictive

Test 3: Root-level adverbs

	Deictic Dem	Anaphoric Dem
pre-Dem RC	*restrictive/appositive	can be restrictive
post-Dem RC	can be restrictive	can be restrictive

Excerpt pre-Dem RCs for deictic Dem, the question remains for the other three cases: can it only be restrictive or also be appositive?

Test 3: Root-level adverbs

	Deictic Dem	Anaphoric Dem
pre-Dem RC	*restrictive/appositive	can be restrictive
post-Dem RC	can be restrictive	can be restrictive

Excerpt pre-Dem RCs for deictic Dem, the question remains for the other three cases: can it only be restrictive or also be appositive?

We need a test to rule out restrictive RCs!

Applying Test 3: Only appositives can host root-level adverbs (Emonds 1979).

(13) a. The student, who frankly has much time, should help you.
      b. #The student that frankly has much time should help you.

Test 3: Root-level adverbials

- Deictic use of Dem

(14) ...... yinggai bang ni
      should help you
  '....... should help you'

  a. [_RC_ laoshishuo you henduo shijian de] ☞ zhe wei xuesheng
     frankly   have much time DE   this CL student

  b. ☞ zhe wei [_RC_ laoshishuo you henduo shijian de] xuesheng
      this CL   frankly   have much time DE student
    'This student, who frankly has much time, '

→ This shows:

	Deictic Dem
pre-Dem RC	can be appositive
post-Dem RC	can be appositive

Test 3: Root-level adverbials

- Anaphoric use of Dem

(15)   mou wei xuesheng ying-le   bisai. wo hen xinshang ......
     some CL student   win-PERF game I   very admire
     'Some student won the game. I admire ......'

    a. [$_{RC}$ laoshishuo congbu songxie de] zhe wei xuesheng
           frankly   never   slack   DE this CL student

    b. zhe wei [$_{RC}$ laoshishuo congbu songxie de] xuesheng
       this CL   frankly   never   slack   DE student
       'this student, who frankly never slacks off'

→ This shows:

	Anaphoric Dem
pre-Dem RC	can be appositive
post-Dem RC	can be appositive

Generalizations

	Deictic Dem	Anaphoric Dem
pre-Dem RC	*restrictive/appositive	restrictive/appositive
post-Dem RC	restrictive/appositive	restrictive/appositive

$\rightarrow$ How to capture the generalization?

We adopt the matching analysis for the syntax of RCs such that a null operator moves within RCs.

(16) [$_{RC}$ Op$_i$ [t$_i$ ying-le   bisai]]-de
                    win-PERF game MOD

$\llbracket$[$_{RC}$ Op$_i$ [t$_i$ ying-le bisai]]-de$\rrbracket$ = $\lambda x.$**win**.**the**.**game**(x)
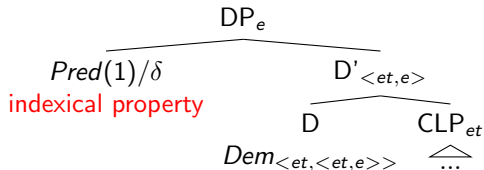
Demonstratives as strong definite articles

Demonstratives have an extra argument slot (Elbourne 2005; Schwarz 2009; Jenks 2018).

(17) Anaphoric use:
[A student]$_1$ just came in. [That student]$_1$ seemed happy.
$[\![Pred(1)]\!]^g = \lambda x.x = g(1)$

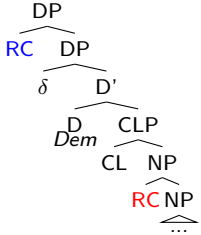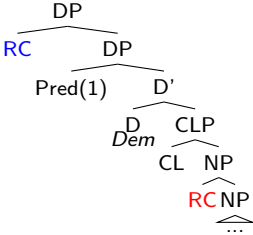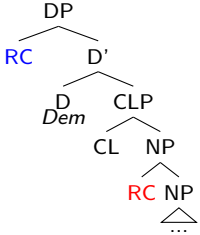$$[\![that]\!] = \lambda P \lambda Q : \exists!x[P(x)\&Q(x)].\iota x[P(x)\&Q(x)]$$

```
                        DP_e
            _____/    _____
    Pred(1)/δ                    D'_<et,e>
  indexical property           /        \
                              D          CLP_et
                         Dem_<et,<et,e>>    ‾‾‾‾
                                            ...
```

(18) Deictic use:
☞ That student seemed happy.
$[\![δ]\!] = \lambda x.L_δ(x)$ ($L_δ(x)$ is true iff x is in a distal location demonstrated by the speaker's gesture $δ$)
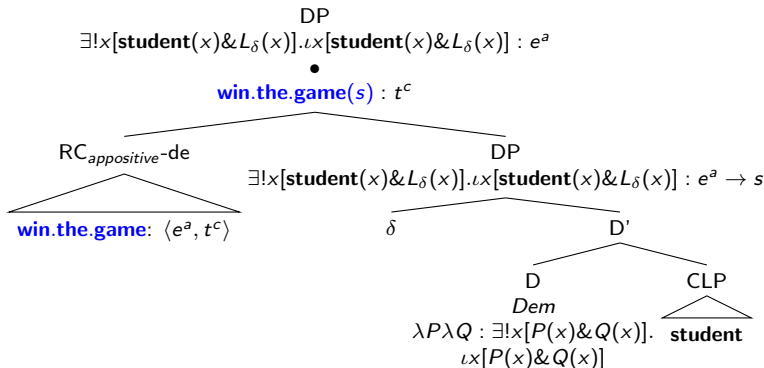
Analysis

- Deictic use: SpecDP is **obligatorily** occupied by the demonstration δ
- Anaphoric use: SpecDP is **optionally** occupied by the referential index

Deictic Dem	Anaphoric Dem	
Pre-Dem RCs adjoin to DP	Pre-Dem RCs adjoin to DP	Pre-Dem RCs in SpecDP
$\rightarrow$ appositive		$\rightarrow$ restrictive
Post-Dem RCs adjoin to NP$\rightarrow$ restrictive/appositive		

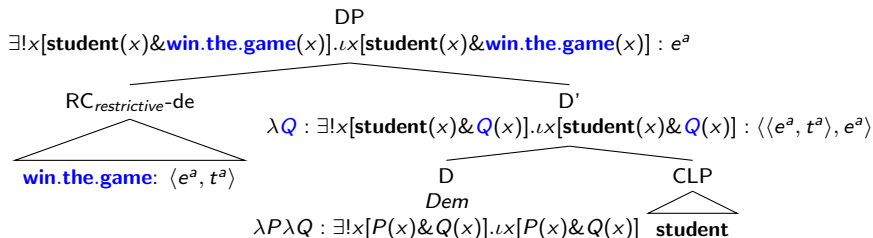# Analysis (pre-Dem RCs)

	Deictic Dem	Anaphoric Dem
pre-Dem RC	*restrictive/appositive	restrictive/appositive

The composition of conventional implicatures (CI application, Potts 2005)

	Deictic Dem	Anaphoric Dem
pre-Dem RC	*restrictive/appositive	restrictive/appositive

DP
$\exists!x[\textbf{student}(x)\&\textbf{win.the.game}(x)].\iota x[\textbf{student}(x)\&\textbf{win.the.game}(x)] : e^a$

RC$_{restrictive}$-de

win.the.game: $\langle e^a, t^a \rangle$

D'
$\lambda Q : \exists!x[\textbf{student}(x)\&Q(x)].\iota x[\textbf{student}(x)\&Q(x)] : \langle\langle e^a, t^a\rangle, e^a\rangle$

D
Dem
$\lambda P\lambda Q : \exists!x[P(x)\&Q(x)].\iota x[P(x)\&Q(x)]$

CLP

student

Analysis (pre-Dem RCs)

	Deictic Dem	Anaphoric Dem
pre-Dem RC	*restrictive/appositive	restrictive/appositive

DP
$\exists!x[\textbf{student}(x)\&x=g(1)].\iota x[\textbf{student}(x)\&x=g(1)] : e^a$

$\bullet$

$\textbf{win}.\textbf{the}.\textbf{game}(s) : t^c$

$RC_{appositive}$-de

$\textbf{win}.\textbf{the}.\textbf{game}: \langle e^a, t^c \rangle$

DP
$\exists!x[\textbf{student}(x)\&x=g(1)].\iota x[\textbf{student}(x)\&x=g(1)] : e^a \rightarrow s$

$Pred(1)$

D'
$\lambda Q : \exists!x[\textbf{student}(x)\&Q(x)].\iota x[\textbf{student}(x)\&Q(x)]$

D
Dem
$\lambda P \lambda Q : \exists!x[P(x)\&Q(x)].$
$\iota x[P(x)\&Q(x)]$

CLP

$\textbf{student}$

	Deictic Dem	Anaphoric Dem
post-Dem RC	restrictive/appositive	restrictive/appositive

Analysis (post-Dem RCs)

	Deictic Dem	Anaphoric Dem
post-Dem RC	restrictive/appositive	restrictive/appositive
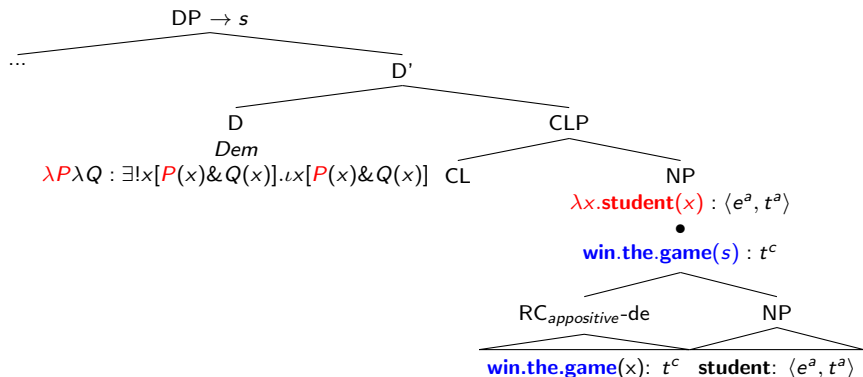
Appositives can be propositional and contain a variable that is saturated by the value of the nearest discourse referent (Potts 2005; Constant 2011)

Conclusions

- Two uses of demonstrative are distinguished:

	Deictic Dem	Anaphoric Dem
SpecDP	*(δ)	(referential index)

- Different uses of demonstratives interact with the restrictive/appositive distinction of RCs:

	Deictic Dem	Anaphoric Dem
pre-Dem RC	appositive	restrictive/appositive
post-Dem RC	restrictive/appositive	restrictive/appositive

- No one-to-one correspondence between RC's pre/post-Dem position and its R/A distinction

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- No one-to-one correspondence between RC's pre/post-Dem position and its R/A distinction

Further questions:

$$<RC> \left\{ \begin{array}{l} \text{Dem Num CL} \\ \text{Num CL} \\ \text{Quantifier (CL)} \end{array} \right\} <RC> \text{N}$$