The syntactic properties of individual and group classifiers in Mandarin

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Canadian Linguistic Association

WHAT IS A CLASSIFIER?

A **CLASSIFIER** is a word or affix that accompanies a noun. It can be used to express a conceptual classification of the referent of a noun.

non-classifier languages (e.g., English)
3 students

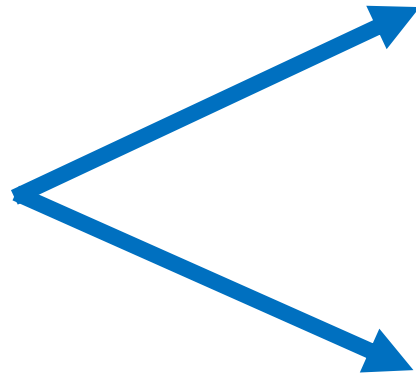| classifier languages (e.g., Mandarin) |
|---|
| 3 **ge** xuesheng |
| 3 **CL** student |
| '3 students' |

MANDARIN CLASSIFIERS

Bare nouns can be interpreted as either singular or plural

xuesheng
'student'

MANDARIN CLASSIFIERS

To quantify a noun, a **CLASSIFIER** must appear.

(1) a. ***** 3 xuesheng

three student

'three students'

b. 3 **ge** xuesheng

three **CL** student

'three students'

MANDARIN CLASSIFIERS

Two types of classifiers are considered here

individual classifiers

group classifiers

MANDARIN CLASSIFIERS

individual classifiers

group classifiers

for counting
atomic entities

for counting
non-atomic entities

(2) 3   **ge**   xuesheng

three   CL$_{individual}$ student

'three **(individual)** students'

(3) 3   **qun**   xuesheng

three   CL$_{group}$ student

'three **groups** of students'

ROAD MAP

- RESEARCH QUESTIONS

- ANALYSIS I: MANDARIN CLASSIFIERS

  individual classifiers

  group classifiers

- ANALYSIS II: MANDARIN CLASSIFIERS & *-men*

- ANALYSIS III: MANDARIN CLASSIFIERS & *de*

- CONCLUSION

ROAD MAP

- **RESEARCH QUESTIONS**

- ANALYSIS I: MANDARIN CLASSIFIERS

  individual classifiers

  group classifiers

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- ANALYSIS III: MANDARIN CLASSIFIERS & *de*

- CONCLUSION

RESEARCH QUESTIONS

Mandarin individual and group classifiers have **similarities** and **differences**, which raise two questions:

i. Are individual and group classifiers similar because they have the same category?

ii. If so, how do we account for the differences between these two types of classifiers?

SIMILARITY

Both individual and group classifiers appear between the numeral and the noun.

(4) a. 3   **ge**   xuesheng

three   CL$_{individual}$ student

'three students'

b. 3   **qun**   xuesheng

three   CL$_{group}$ student

'three groups of students'

DIFFERENCE

Group classifiers can co-occur with *–men*, but individual classifiers <u>cannot.</u>

(5) a. *3   **ge**   xuesheng-**men**

three $CL_{individual}$ student-PL

'three students'

b. 3   **qun**   xuesheng-**men**

three CL_{group} student-PL

'three groups of students'

DIFFERENCE

Group classifiers can co-occur with linker *de*, but individual classifiers <u>cannot.</u>

(6) a. *3　　　**ge**　　　　**de**　　xuesheng

　　　　　three　　$CL_{individual}$　　DE　　student

　　　　　'three students'

　　b. 3　　　　**qun**　　**de**　　　xuesheng

　　　　　three　　CL_{group}　　DE　　　student

　　　　　'three groups of students'

ROAD MAP

- RESEARCH QUESTIONS

- **ANALYSIS I: MANDARIN CLASSIFIERS** individual classifiers

  group classifiers

- ANALYSIS II: MANDARIN CLASSIFIERS & *-men*

- ANALYSIS III: MANDARIN CLASSIFIERS & *de*

- CONCLUSION

SIMILARITY

Both individual and group classifiers appear between the numeral and the noun.

(7) a. <u>3</u>   **ge**   <u>xuesheng</u>

         three   CL$_{individual}$ student

         'three students'

     b. <u>3</u>   **qun**   xuesheng

         three   CL$_{group}$ student

         'three groups of students'

COMPLEMENTARITY
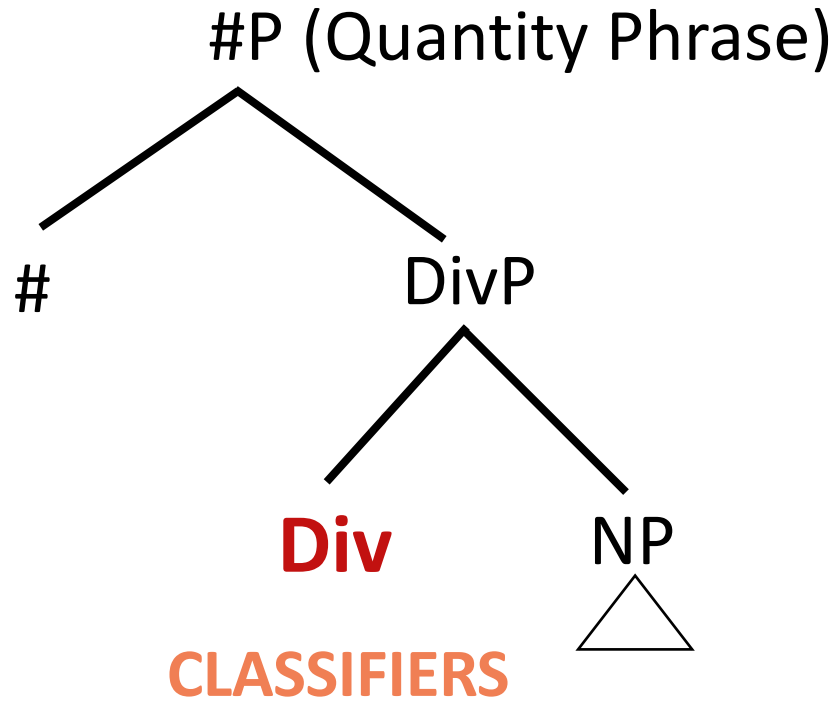
Individual and group classifiers <u>cannot</u> co-occur.

(8)   *3   **ge**   **qun**   xuesheng

        three $CL_{individual}$ CL_{group} student

RESEARCH QUESTIONS

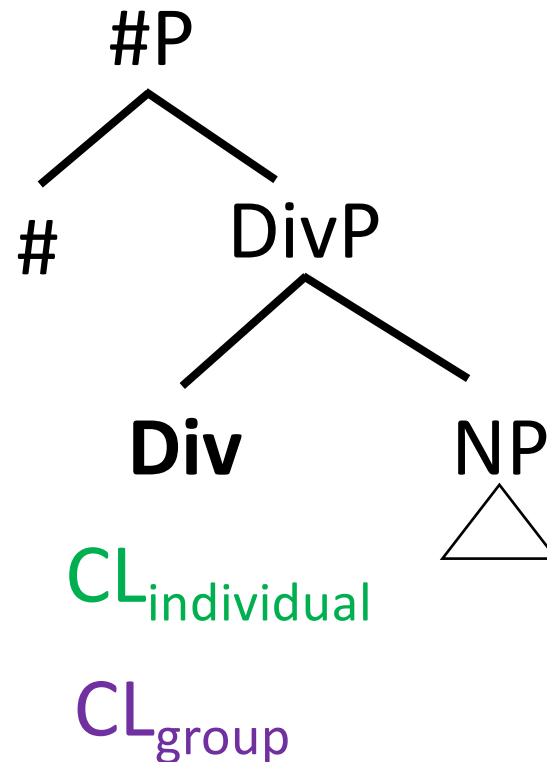Mandarin individual and group classifiers have **similarities** and **differences**, which raise two questions:

i. Are individual and group classifiers similar because they have the same category?

ii. If so, how do we account for the differences between these two types of classifiers?

BORER (2005)

#P (Quantity Phrase)

```
        #P (Quantity Phrase)
         /        \
        #          DivP
                   /    \
                 Div     NP
                  △
             CLASSIFIERS
```

➤ all **nouns are mass and must be divided** into units in order to be quantified**.**

➤ the dividing function is realized by a category, **Division (Div).**

➤ **Div: CLASSIFIERS**

EXTEND TO MANDARIN

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Mandarin **individual** and **group** classifiers are always generated in **Div**
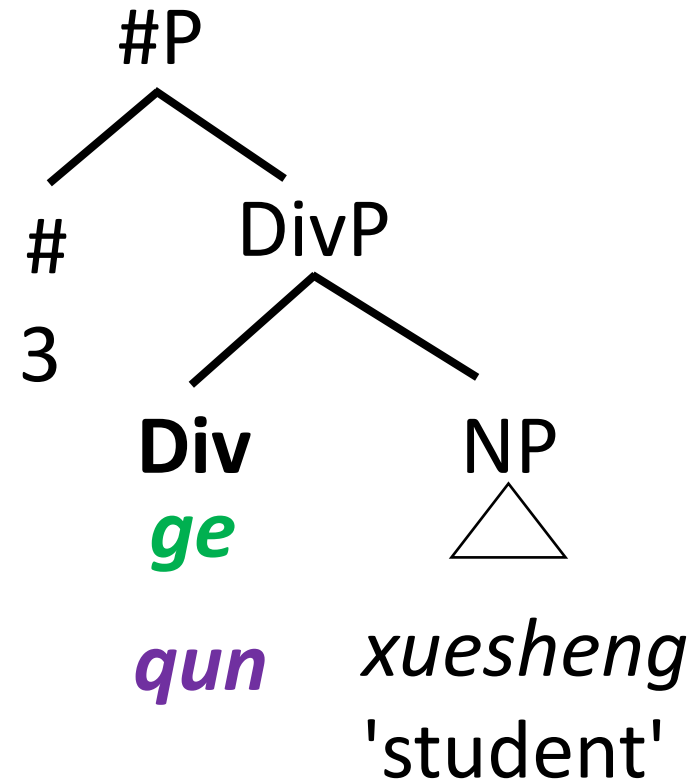
(9) a. 3 **ge** xuesheng

      three CL$_{individual}$ student

      'three students'

  b. 3 **qun** xuesheng

      three CL$_{group}$ student

      'three groups of students'

  c. *3 **ge** **qun** xuesheng

      three CL$_{individual}$ CL$_{group}$ student

#P
├─ #
│ └─ 3
└─ DivP
   ├─ **Div**
   │ *ge*
   │ *qun*
   └─ NP
      xuesheng
      'student'

RESEARCH QUESTIONS

Mandarin individual and group classifiers have similarities and **differences**, which raise two questions:

i. Are individual and group classifiers similar because they have the same category?

ii. If so, how do we account for the differences between these two types of classifiers?

ROAD MAP

- RESEARCH QUESTIONS

- ANALYSIS I: MANDARIN CLASSIFIERS

  | individual classifiers |
  | group classifiers |

- **ANALYSIS II: MANDARIN CLASSIFIERS & *-men***
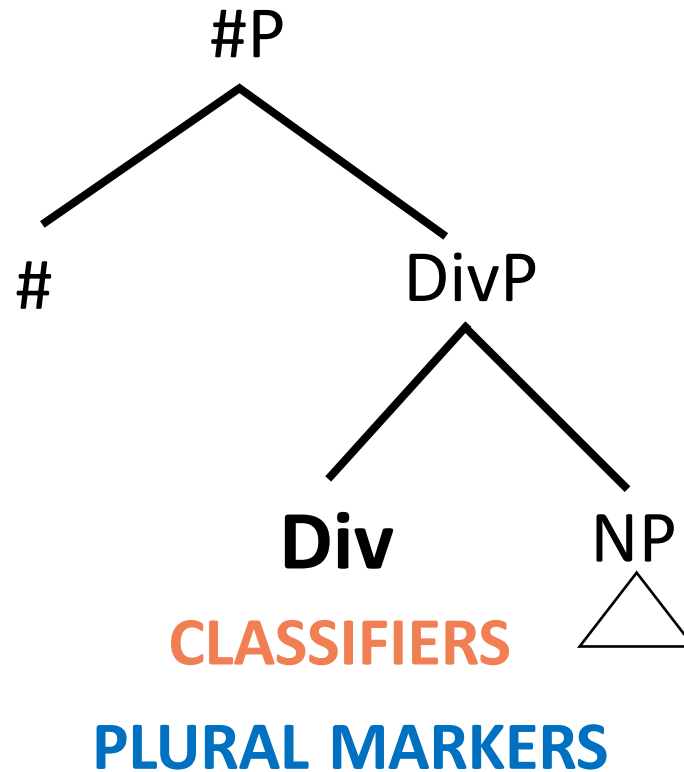
- ANALYSIS III: MANDARIN CLASSIFIERS & *de*

- CONCLUSION

BORER (2005)

➢ the dividing function
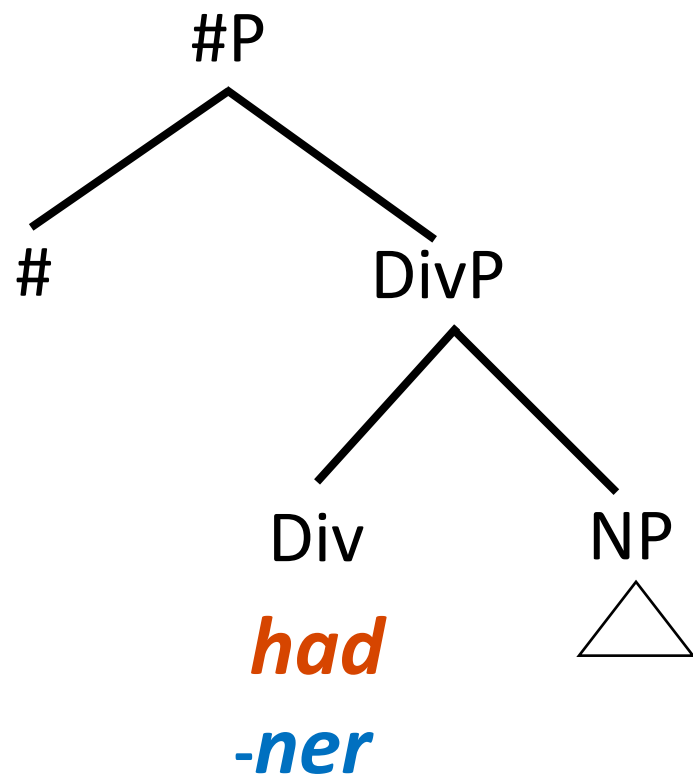
Classifiers

Plural markers

```
              #P
             /  \
            #    DivP
                /   \
              Div    NP
                      △
          CLASSIFIERS

      PLURAL MARKERS
```

BORER (2005)

ARMENIAN

classifiers & plural marker

```
        #P
       /  \
      #    DivP
          /    \
        Div     NP
         |       △
        had
        -ner
```
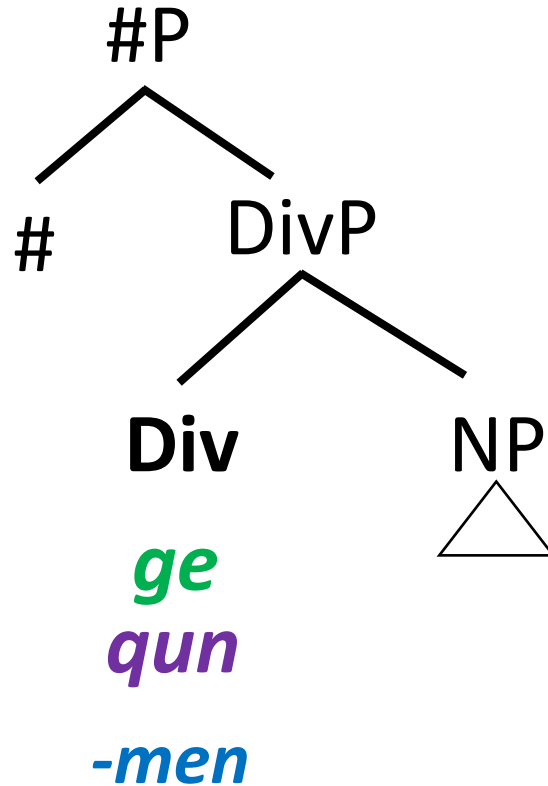
(10) a. 2   **had**   hovanoc   uni-m

two   CL   umbrella   have-1sg

'I have 2 umbrellas.'

b. 2   hovanoc-**ner**   uni-m

two   umbrella-PL   have-1sg

'I have 2 umbrellas.'

c. *2   **had**   hovanoc-**ner**   uni-m

two   CL   umbrella-PL   have-1sg
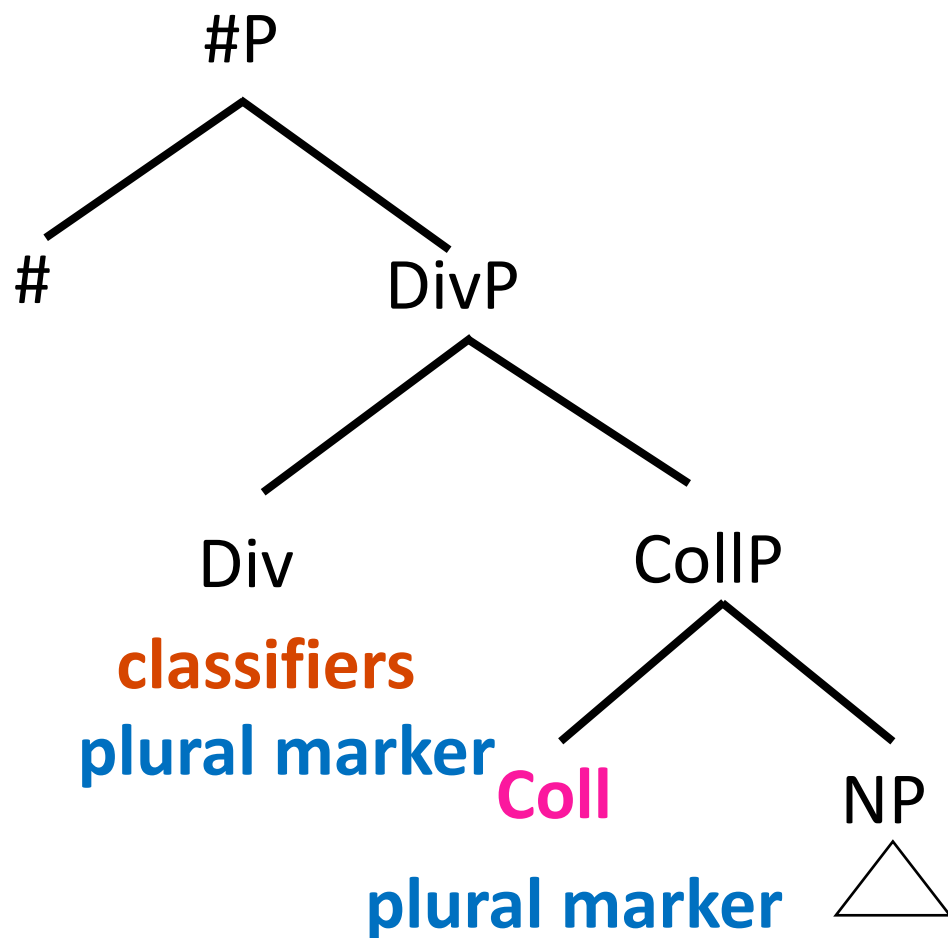
Mandarin: a problem for Borer

#P
├─ #
└─ DivP
   ├─ **Div**
   │   *ge*
   │   *qun*
   │   *-men*
   └─ NP

➤ *$CL_{individual}$ + Noun-*men*
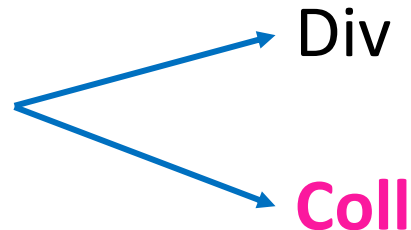
(11) *3   **ge**   xuesheng-*men*

      three $CL_{individual}$ student-**PL**

      'three students'

➤ CL_{group} + Noun-*men*

(12) 3   **qun**   xuesheng-*men*

      three CL_{group} student-**PL**
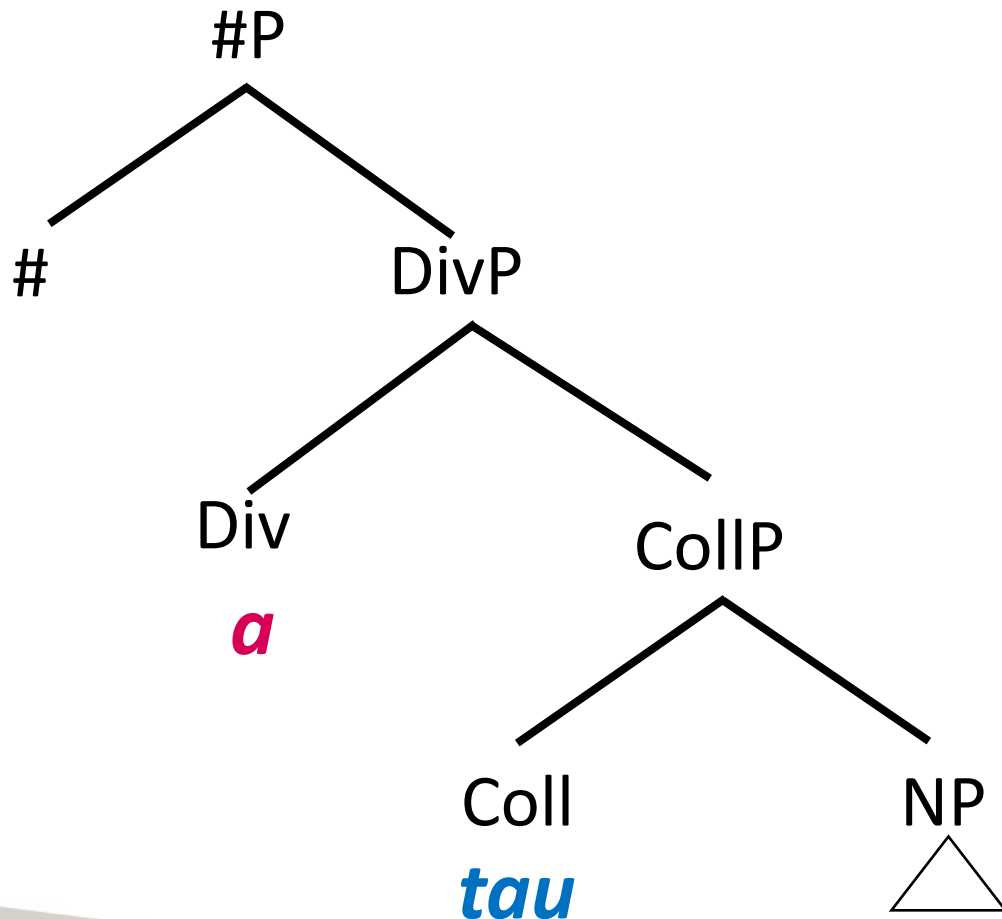
      'three groups of students'

MASSAM (2009)

#P
├─ #
└─ DivP
   ├─ Div **classifiers** / **plural marker**
   └─ CollP
      ├─ Coll **plural marker**
      └─ NP △

- ➤ modifies Borer's (2005) structure.

- ➤ proposes an additional phrase 'Collective' (**Coll**) between DivP and NP.

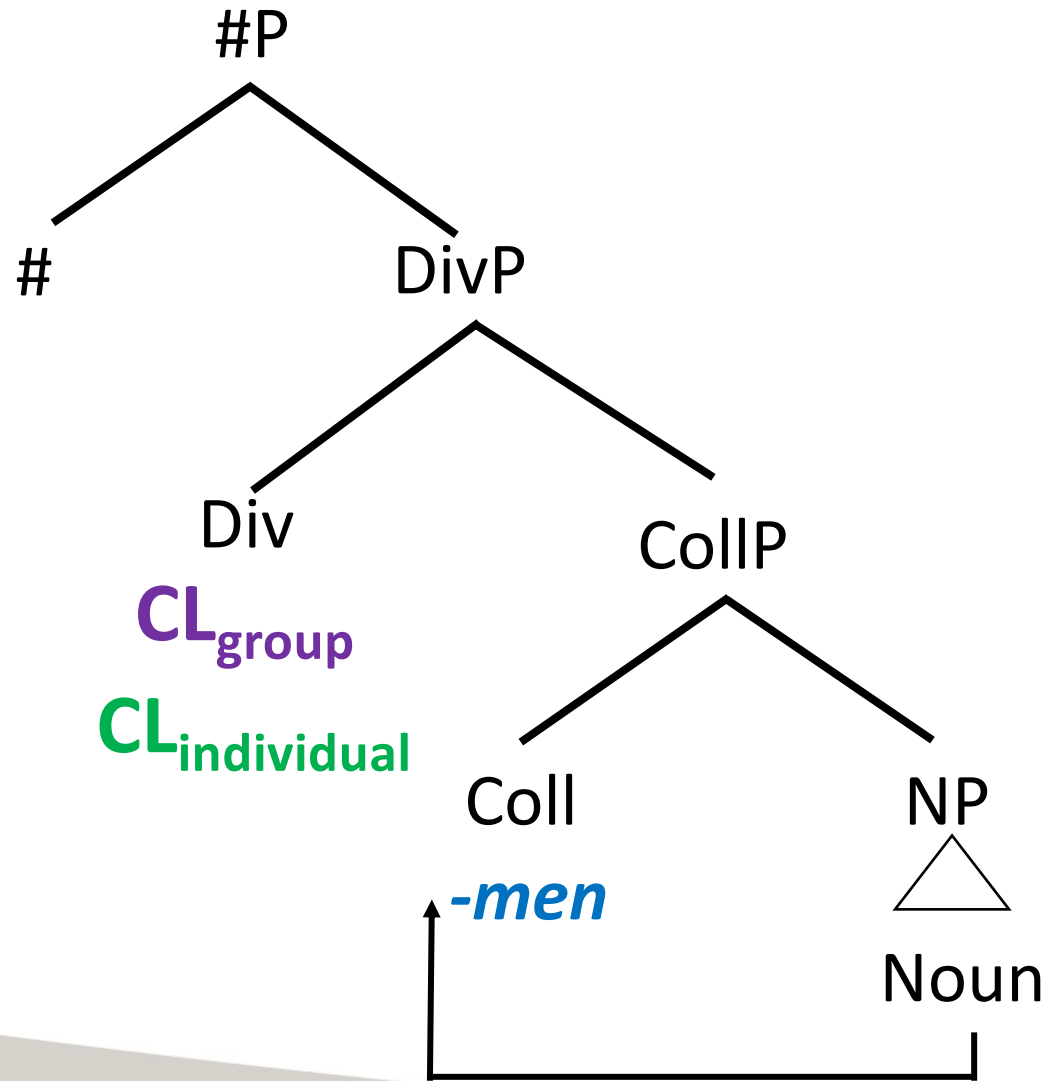- ➤ 'Collective' (**Coll**): the denotation of nouns are groups.

- ➤ **Plural marker** → Div / → **Coll**

25

MASSAM (2009)

NIUEAN (an Austronesian language)

classifiers & **plural marker**

```
          #P
         /  \
        #    DivP
            /    \
          Div     CollP
           a     /     \
               Coll     NP
               tau      △
```

(13) falu **a** **tau** fuata

     some CL PL youth

'some youths'

#P
├── #
└── DivP
    ├── Div
    │   **CL**group
    │   **CL**individual
    └── CollP
        ├── Coll
        │   *-men*
        └── NP
            └── Noun

➤ **CL**group + Noun-*men*

(14)   3   **qun**   xuesheng-*men*

three   **CL**group   student-**PL**

'three groups of students'

➤ ***CL**individual + Noun-*men*

(15)   *3   **ge**   xuesheng-*men*

three   **CL**individual   student-**PL**

'three students'

FEATURES

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CL$_{group}$ $\rightarrow$ *i*[GROUP]

-men $\rightarrow$ *u*[GROUP]

[GROUP]: the group or collection of entities

CL$_{individual}$ $\rightarrow$ *i*[ATOMIC]

[ATOMIC]: the individual entities
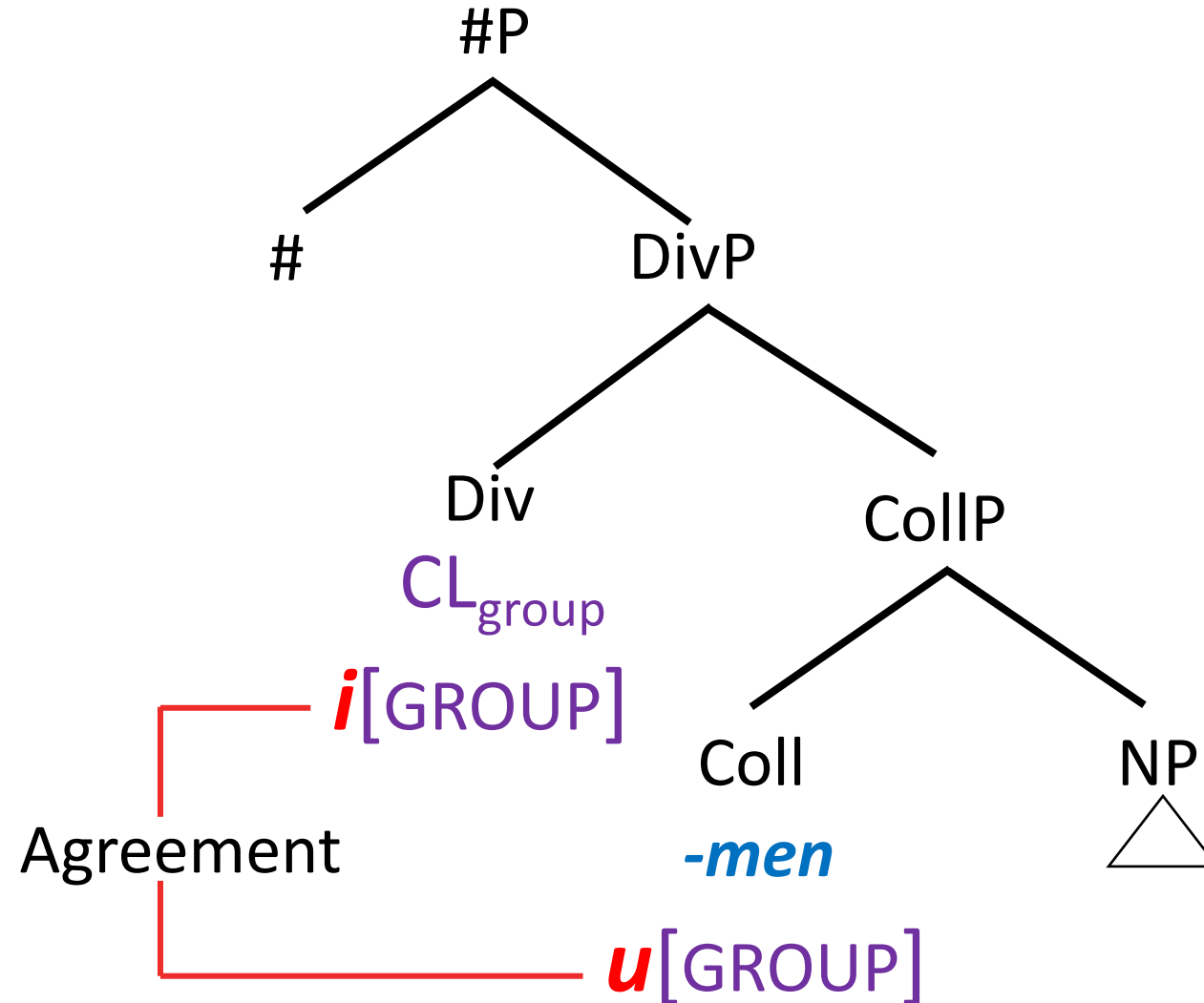
*CL_{individual} & *-men*
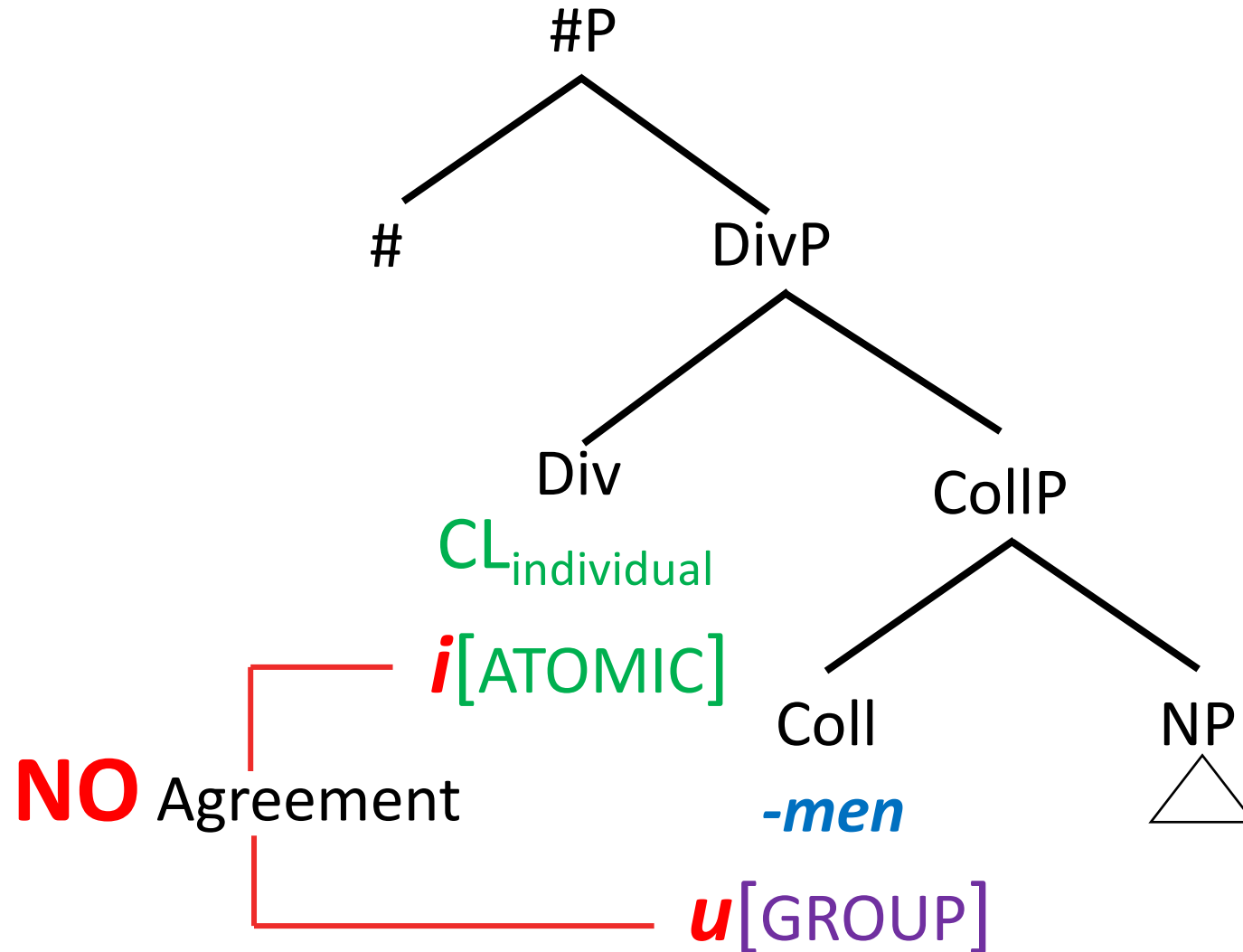
ROAD MAP

- RESEARCH QUESTIONS

- ANALYSIS I: MANDARIN CLASSIFIERS

individual classifiers
group classifiers

- ANALYSIS II: MANDARIN CLASSIFIERS & *-men*

- **ANALYSIS III: MANDARIN CLASSIFIERS & *de***

- CONCLUSION

SIMILARITY: *-men* and *de*

Group classifiers can co-occur with linker **de**, but individual classifiers <u>cannot.</u>

(16)   a.   *****3   **ge**   **de**   xuesheng

              three $CL_{individual}$ DE   student

              'three students'

      b.   3   **qun**   **de**   xuesheng

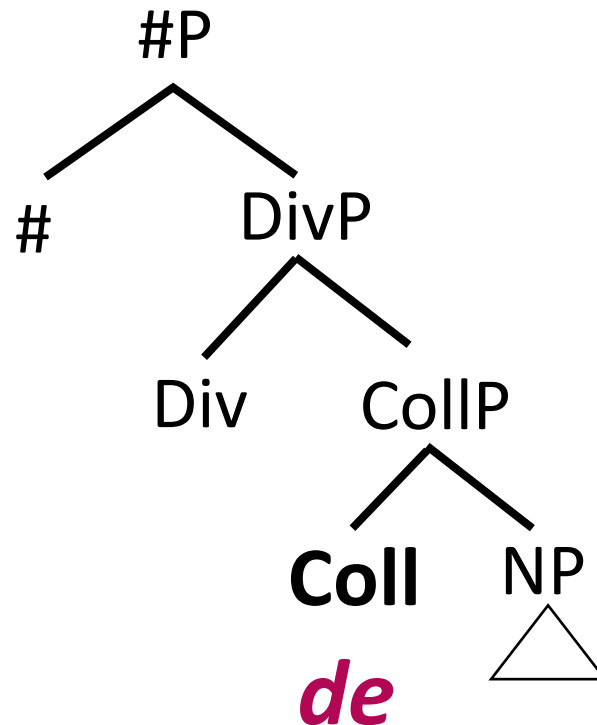   three CL_{group} DE   student

              'three groups of students'

COMPLEMENTARITY: *-men* and *de*

-men and **de** <u>cannot</u> co-occur.

(17) *****3   qun   **de**   xuesheng-**men**

three   CL_{group}   **DE**   student-**PL**
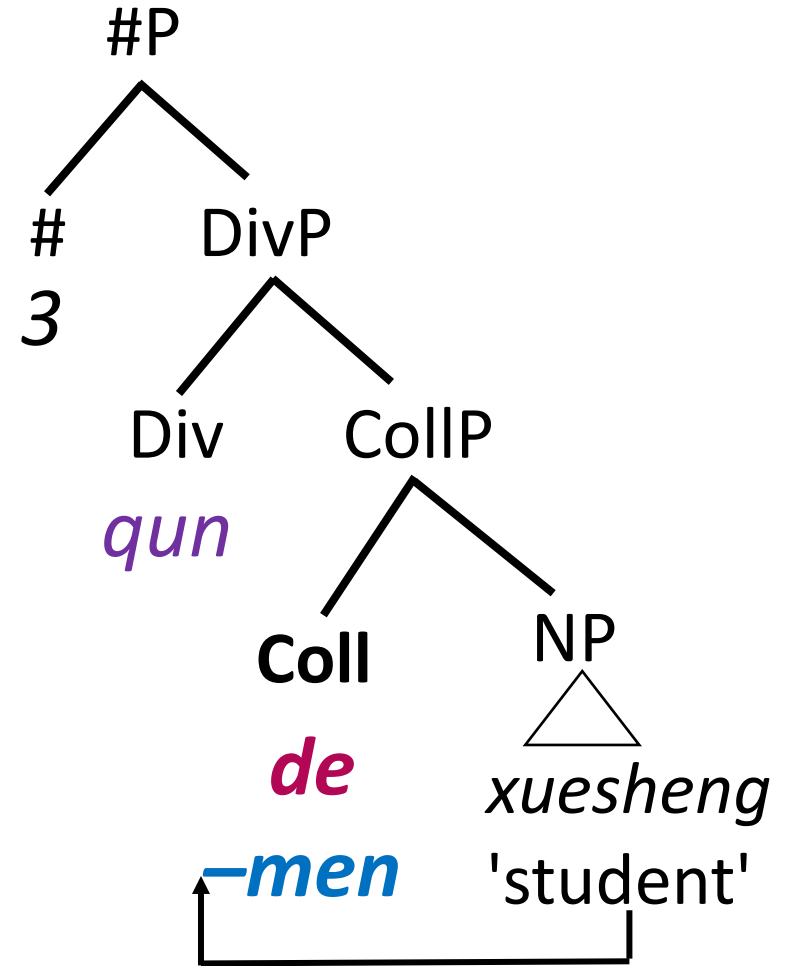
'three groups of students'

THE POSITION OF *de*

de is generated in Coll

```
            #P
           /  \
          #    DivP
              /   \
            Div    CollP
                   /   \
                Coll    NP
                 de     △
```

THE POSITION OF *de*

(18) a. 3   qun   **de**   xuesheng

three   CL~group~   **DE**   student

'three groups of students'

b.   3   qun   xuesheng-**men**

three   CL~group~   student-**PL**

'three groups of students'

c.   ***3**   qun   **de**   xuesheng-**men**

three   CL~group~   **DE**   student-**PL**

#P
DivP
3
Div   CollP
qun
Coll   NP
de   *xuesheng*
–men   'student'

DIFFERENT READINGS: *-men* and *de*

Noun-**men**: collective readings

(19) xuesheng-**men**   huode   1   ge   jiangpin.

student-PL   get   one   CL   trophy

'The students got one trophy **together**.'

DIFFERENT READINGS: *-men* and *de*

de Noun: **NO** collective readings

(20) a. piaoliang **de** xuesheng huode 1 ge jiangpin.
pretty DE student get one CL trophy
'Pretty students get a trophy **each**.'

b. piaoliang xuesheng huode 1 ge jiangpin.
pretty student get one CL trophy
'Pretty students get a trophy **each**.'

FEATURES

CL$_{group}$ $\rightarrow$ i[GROUP]

$[GROUP]$: the group or collection of entities

-men $\rightarrow$ u[GROUP]

CL$_{individual}$ $\rightarrow$ i[ATOMIC]

$[ATOMIC]$: the individual entities

de $\rightarrow$ **NO** features

MASSAM (2009)
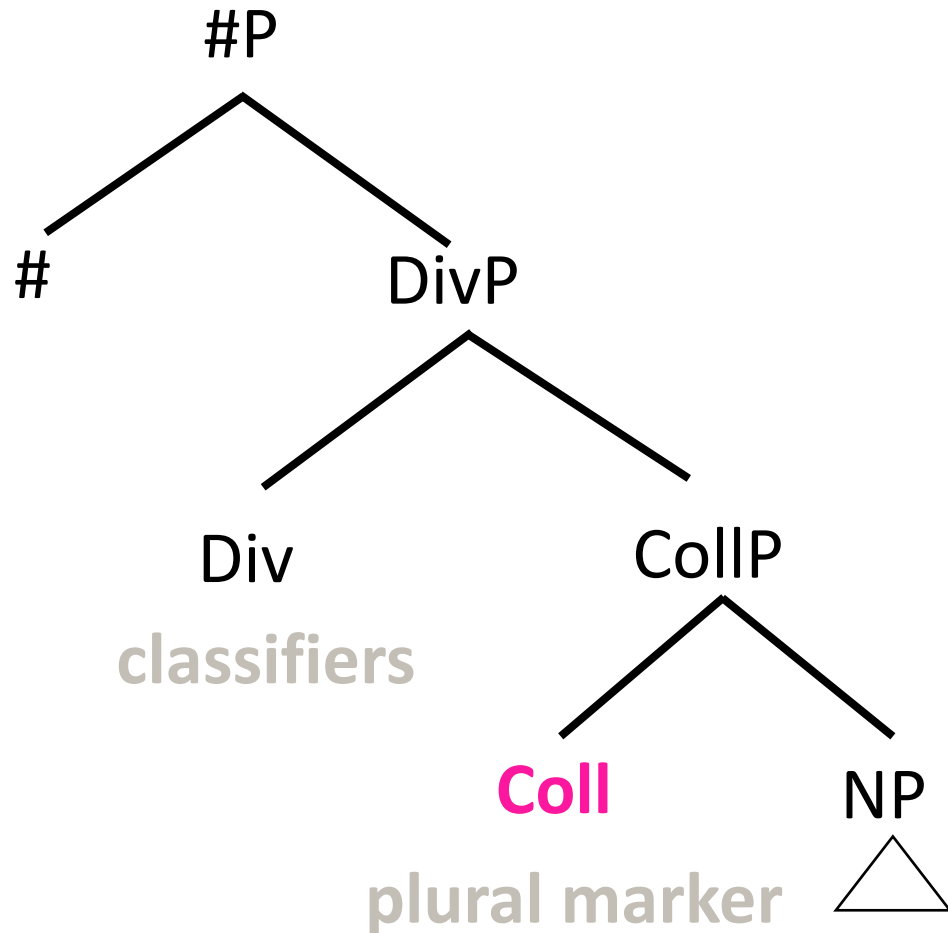
```
        #P
       /  \
      #    DivP
          /    \
        Div    CollP
      classifiers  /    \
                Coll     NP
           plural marker  △
```

> modifies Borer's (2005) structure.

> proposes an additional phrase 'Collective' (**Coll**) between DivP and NP.

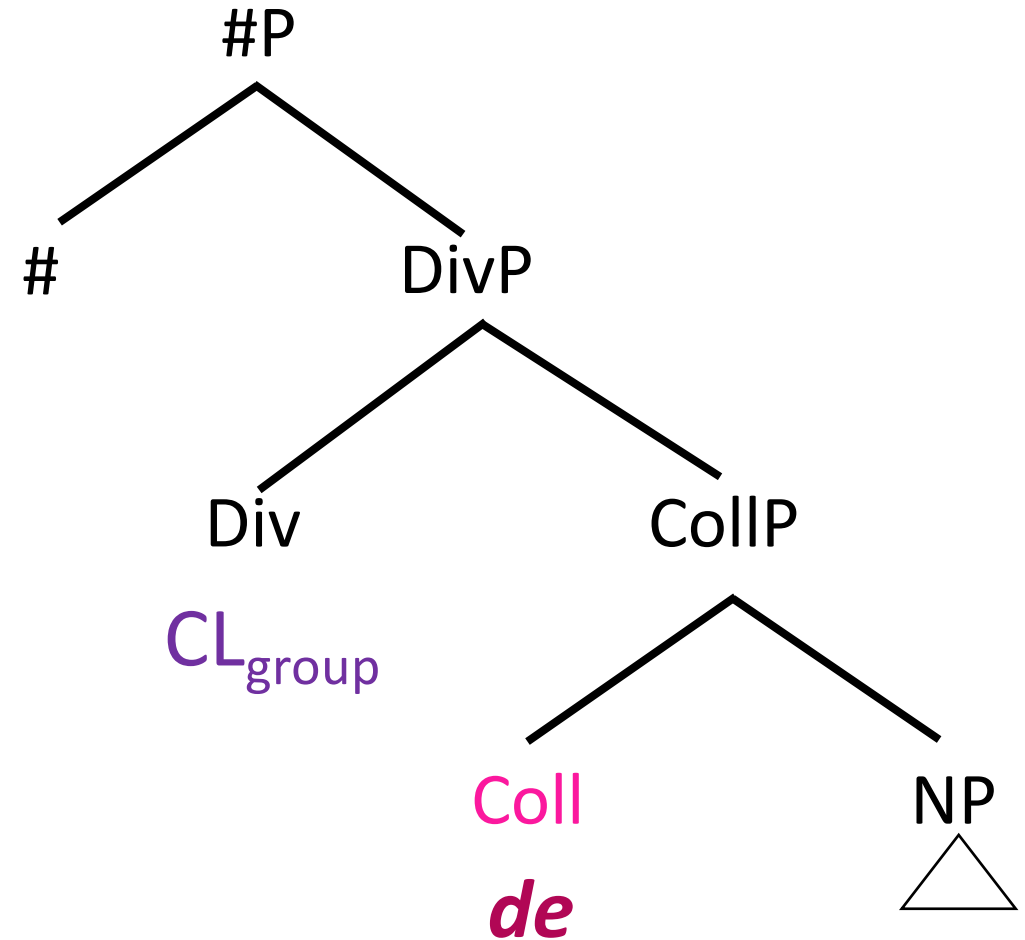> 'Collective' (**Coll**): the denotation of nouns are groups.

> **Plural marker** → Div
                      → **Coll**

CL_{group} **&** *de*

Coll: the denotation of nouns are groups.

CL_{group} → [GROUP]

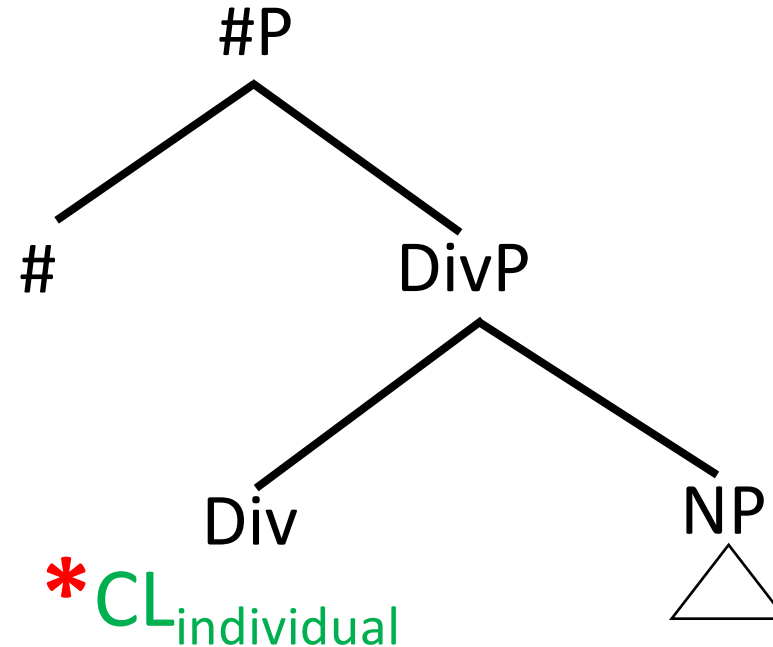**Div containing CL**_{group} **can take CollP as its complement.**

#P
├─ #
└─ DivP
   ├─ Div
   │ CL_{group}
   └─ CollP
      ├─ Coll
      │ *de*
      └─ NP

*CL_{individual} & *de*

Coll: the denotation of nouns are groups.

CL_{individual} → [ATOMIC]

Div containing CL_{individual} **cannot** take **Coll**P as its complement.

#P
├── #
└── DivP
     ├── Div
     │   *CL_{individual}
     └── NP

ROAD MAP

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individual classifiers

group classifiers

- ANALYSIS II: MANDARIN CLASSIFIERS & *-men*

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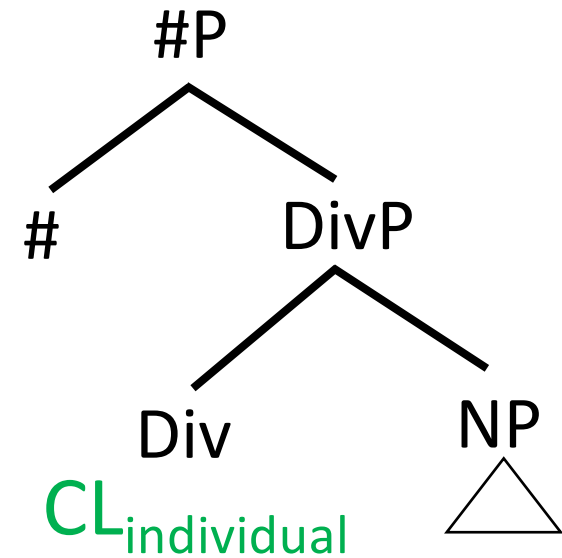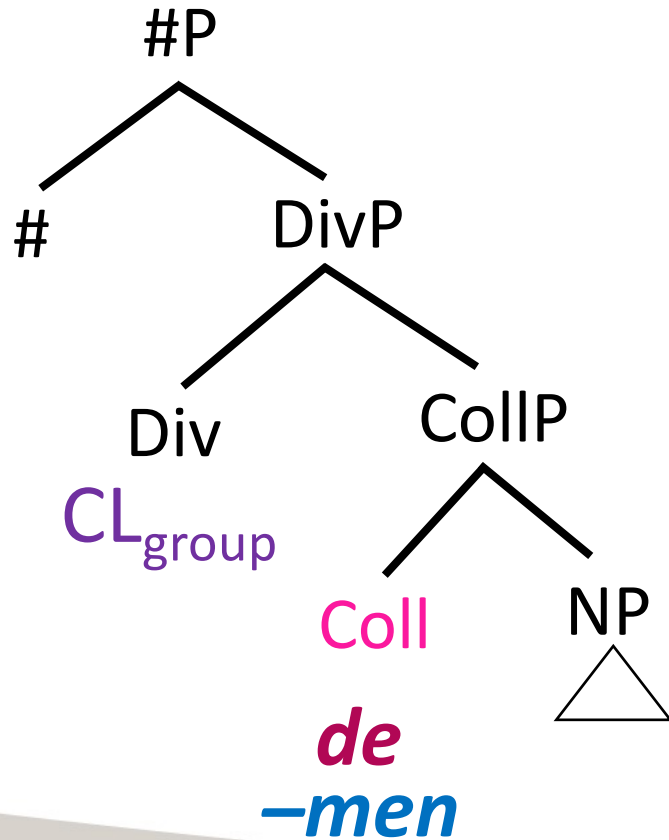
- **CONCLUSION**

SUMMARY

individual and group classifiers are generated in **Div**
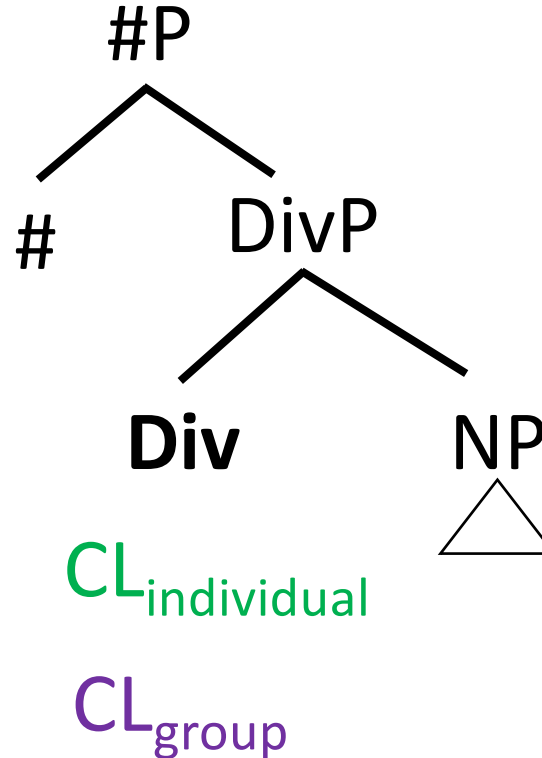
SUMMARY

CL_{group} → [GROUP] $CL_{individual}$ → [ATOMIC]

RESEARCH QUESTIONS

Mandarin individual and group classifiers have **similarities** and **differences**, which raise two questions:

i. Are individual and group classifiers similar because they have the same category?

Yes, individual and group classifiers have the same category, **Div**.

ii. If so, how do we account for the differences between these two types of classifiers?

Their differences are attributed to **different features** on individual and group classifiers…and their **complement options** (CollP vs NP).

Questions? Comments?

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REFERENCE

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Massam, Diane. 2009. On the Separation and Relatedness of Classifiers, Number, and Individuation in Niuean. *LANGUAGE AND LINGUISTICS* 10(4): 669–699.