

# Two positions of RED in Chinese adjectival compound formation

NELS 49
Cornell University
October 5-7, 2018

Yenan Sun & Jackie Yan-Ki Lai; {yenansun, jyklai}@uchicago.edu

# Background

Reduplication and degree words like *hen* 'very' have a similar effect on gradable adjectives in Mandarin Chinese:

## Bare Adj Adding degree words/reduplication

Directly attributive  $\sqrt{1a}$  ×  $\sqrt{2a}$  Directly predicative ×  $\sqrt{1b}$  ×  $\sqrt{2b}$ 

(1) a. gan.jing (de) chenyi
clean SUB shirt
shirt clean
'the clean shirt'

b. \*chenyi gan.jin
shirt clean
'The shirt is clean.'

(2) a. {gan.gan.jing.jing/hen gan.jing} \*(de) chenyi clean-clean /very clean SUB shirt 'the {clean<sub>RED</sub>/(very) clean} shirt' b. chenyi {gan.gan.jing.jing/hen gan.jing} shirt clean-clean /very clean 'The shirt is {clean<sub>RED</sub>/(very) clean}.'

## Reduplication seems to be in complementary distribution with degree words

(3) chenyi (\*hen) gan.gan.jing.jing shirt very clean-clean

### Previous Claims (Zhang 2015)

- Both the reduplication morpheme (RED) and degree words like *hen* head the functional projection (DegP) above AP;
- Only functional projections like DegP have the [+V] feature, which makes them directly predicative (following Grano 2012).

# RED does not instantiate the same functional head as hen

- [1] Reduplication and degree words can co-occur; the order matters:
- (4) zhei jian chenyi hen gan.jing hen gan.jing this CL shirt very clean very clean 'This shirt is very very clean'
- [2] For a class of 'orphan' reduplicated adjectives which do not have a base form (Liu 2013; Paul 2015):
- (5) a. da.da.lie.lie 'careless<sub>RED</sub>' (<\*da.lie)
  b. po.po.ma.ma 'fussy<sub>RED</sub>' (<\*po.ma)
- (6) a. da.da.lie.lie \*(de) nvhai b. zhei ge nvhai da.da.lie.lie careless SUB girl this CL girl careless the careless<sub>RED</sub> girl' The girl is careless<sub>RED</sub>.'

RED must not occupy the Deg position for them:

(7) a. zhei ge nvhai hen da.da.lie.lie this CL girl very careless 'This girl is (very) careless<sub>RED</sub>.'
b. zhei ge nvhai bi Mali geng da.da.lie.lie this CL girl than Mary more careless 'This girl is more careless<sub>RED</sub> than Lisi.'

## Summary

- RED is indeed a functional head with [+V] feature (2; 6)
- RED is not in complementary distribution with Deg° (3; 4; 7)

# Proposal: Two positions of RED

- (i) RED as the adjectival categorizer a° (with [+V] feature) which takes a root compound (within the framework of Distributed Morphology, Marantz 1997, a.o.)
- (ii) RED as the head of a functional projection which is structurally higher than DegP, which we identify as the 'Emphatic Phrase' (EmpP)

**Assumptions**. Following Lee-Kim (2016), the reduplication pattern is sensitive to the structure of its base.

When the base is a coordinate phrase AB, the resulting form is AABB; When the base is a subordinate phrase AB, the resulting form is ABAB.

#### **Derivations.**

- [1] 'Orphan' reduplicated adjectives are directly predicative ([+V]), but can co-occur with *hen* (RED as the adjectival categorizer a°)
- (8) da.da.lie.lie 'careless'

  aP[+V]

  a

  RED[+V] \square DA \square LIE
- (9) hen da.da.lie.lie 'very careless'

  DegP[+V]

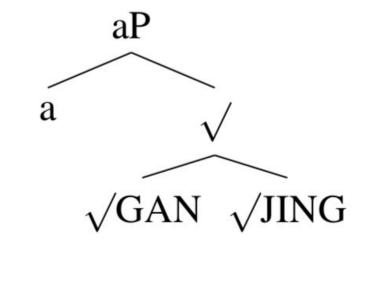
  Deg aP[+V]

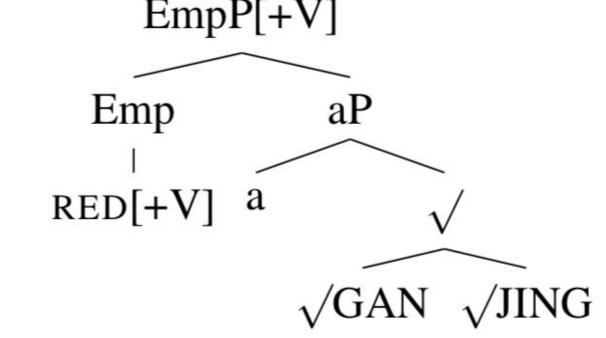
  hen

  a

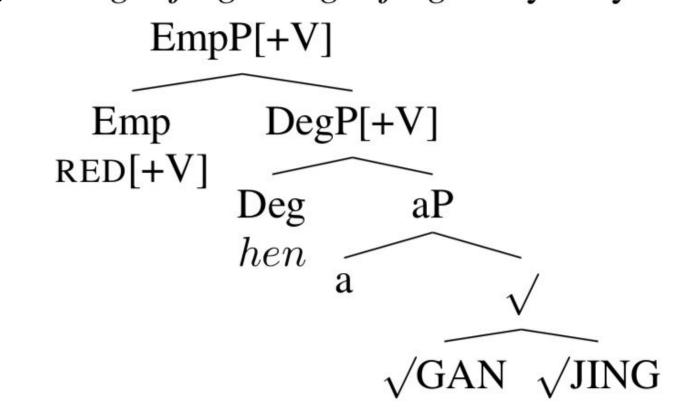
  RED[+V]

  \[
  \sqrt{DA} \sqrt{LIE}
- [2] 'Non-orphan' reduplicated adjectives are directly predicative (10b); though its base is not directly predicative (10a):
- (10) a. gan.jing 'clean' (no [+V])
- b. 'gan.gan.jing.jing 'clean-clean' EmpP[+V]

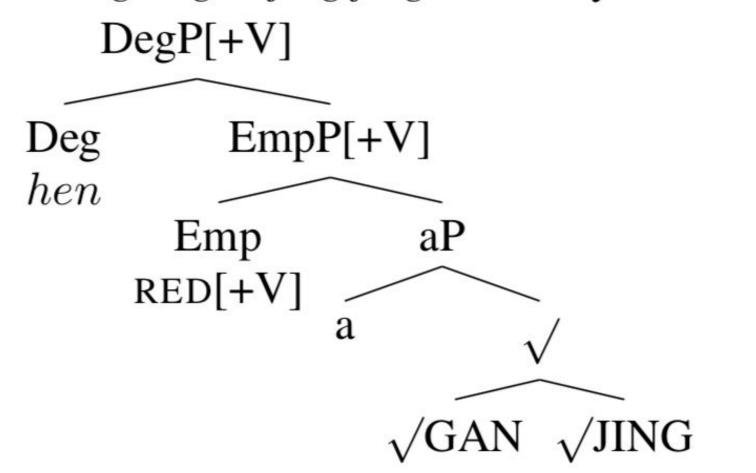




- [3] Reduplication is possible after the addition of hen
- (11) hen ganjing hen ganjing 'very very clean'

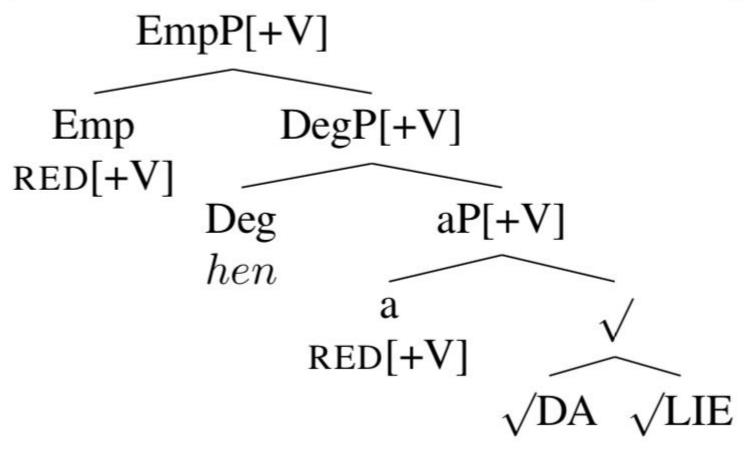


- [4] Addition of a degree word to a 'non-orphan' reduplicated adjective is not possible: EmpP must be higher than DegP in the extended projection
- (12) \*hen gan.gan.jing.jing Int: 'very clean-clean'

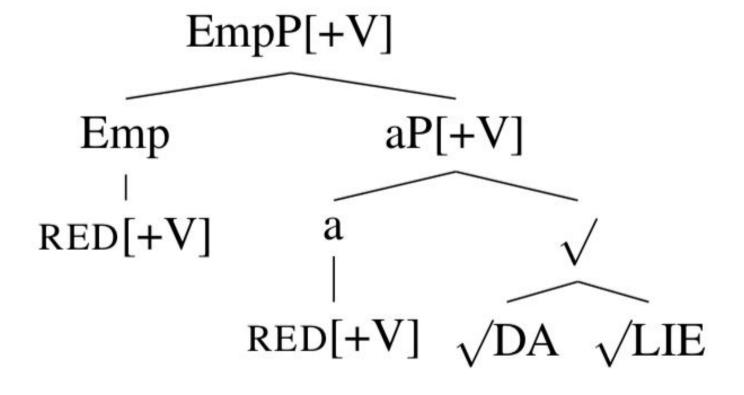


### Extensions

- [1] Since two REDs head different projections, they can co-occur in principle—the prediction is borne out:
- (13) (?)hen dadalielie hen dadalielie 'very very careless'



- [2] Though reduplication can be used either as an adjectival categorizer or an Emp head, (14) is still banned because of the syntactic OCP (Hiraiwa 2010):
- (14) \*da.da.lie.lie.da.da.lie.lie 'careless-careless'



### Conclusions

- Two uses of RED: reduplication morpheme as an adjectival categorizer or as the head of an Emphatic Phrase
- The Emphatic Phrase as an additional functional projection to DegP in the extended projection of adjectives captures the intuition about reduplicated adjectives in Liu (2013), according to which they denote a 'life-like' state and the positive degree conveyed is 'the byproduct of state realization'.

Selected References. Lee-Kim Sang-Im 2016 "Syntax-based phonological asymmetries" Zhang Niina Ning 2015 "Functional head properties of the degree word hen in Mandarin Chinese." Liu Chen-Sheng Luther 2013 "Reduplication of adjectives in Chinese" Grano Thomas 2012 "Mandarin hen and universal markedness in gradable adjectives" Paul Waltraud 2006 "Zhu de xi's two classes of adjectives revisited"