

On Mandarin Degree Adverbial *Hen*

1. Introduction In Mandarin, when an adjective is the main predicate of a declarative, degreed modifiers, such as *feichang* ‘very’ and *xiangdang* ‘quite’, are obligatory (Chao 1968; Li and Thompson 1981). The most common element co-occurring with the adjectives in declaratives is *hen*, traditionally translated as ‘very’. This paper argues there are two *hens*: (i) degree *hen*, which is degree expression and merged at the head of DegP and (ii) functional *hen*, which is semantically bleached and is directly merged at IP, head, serving to type the clause in the sense of Cheng (1991).

2. Critical Data In this section, I lay out some descriptive behaviors of *hen*.

2.1 Obligatory Extra Elements It’s observed that under certain conditions, Mandarin adjectives must co-occur with some extra elements, which are assumed to be degree modifiers, to express declarative meaning.

- (1) a. zhangsan gao
Zhangsan tall. ‘Zhangsan is **taller**.’ instead of ‘Zhangsan is **tall**.’
b. zhangsan feichang gao.
Zhangsan very tall. ‘Zhangsan is very tall.’
c. zhangsan hen gao.
Zhangsan HEN tall. ‘Zhangsan is tall.’ or ‘Zhangsan is very tall.’

Note in (1c) *hen* is ambiguous of being semantically bleached or being an intensifier (Li and Thompson 1981:143).

2.2 Bare Adjective As observed in Grano (2008), degree modification is needed only when the adjective is the predicate of a declarative clause.

- (2) a. non-predicate: hong (de) hua
red DE flower ‘a red flower’
b. non-declarative: zhangsan gao ma?
Zhangsan tall Q ‘Is Zhangsan tall?’

2.3 Unambiguous *Hen* As seen in (1c) *hen* may have two interpretations (bleached or act as an intensifier). Yet, in certain cases, *hen* is unambiguously intensifier only.

- (3) a. zhangsan hen gao ma?
Zhangsan HEN tall Q ‘Is Zhangsan *(very) tall?’
b. zhangsan meiyu hen gao.
Zhangsan Neg HEN tall ‘Zhangsan is not *(very) tall’

2.4 Absolute Adjectives Degree expressions are usually incompatible with absolute adjectives, such as *dui* ‘true’ and *yuan* ‘round’. However, *hen* is okay to co-occur with absolute adjectives.

- (4) a. *Nei ge penzi feichang yuan.
that CL bowl very round
b. Nei ge penzi hen yuan.
that CL bowl HEN round ‘That bowl is round’ (L & T 1981:144)

3. Previous Studies In the literature, the degree expressions are assumed to be the head of degree phrase (e.g. [_{IP} zhangsan [_{DegP} hen [_{AP} gao]]]). There are two kinds of approaches to explain why the degree expression is needed: type-shifter approach and clause-typer approach. The type-shifter approach (Liu, 2005; Huang, 2006) assumes that because of some semantic conflicts, bare adjectives are not compatible with NPs, and the degree expressions shift the type of bare adjectives eliminating the semantic conflicts. This approach is empirically problematic in that it will predict (2a) and (2b) to be bad, but this is not the case. The clause-typer approach is first proposed in Grano (2008), in which the degree expressions serve to type the clause into a declarative, so when it is not a clause or non-declarative degree expressions are not obligatory. This approach accurately capture when the degree expressions are needed and thus is more

plausible than the type-shifter approach. However, Grano (2008) fails short in capturing the ambiguous *hen* (as in 1c) and in capturing when and why *hen* can be intensifier only (as in 3a-b). This paper follows Grano's clause-typing idea that the degree expressions serve to type the clause. However, I modified Grano (2008) by elaborating the syntactic behavior of *hen*.

4. Core proposal Motivated by the ambiguity of (1c), I propose that there are two possible merging sites for *hen* (at DegP, head or IP, head):

- (1c) i. [IP *zhangsan*[I' *hen* [AP *gao*]]] 'Zhangsan is tall.'
 ii. [IP *zhangsan*[Deg *hen* [AP *gao*]]] 'Zhangsan is very tall.'

Considering the semantic of the bleached *hen*, I suggest that the reason that *hen* does not denote to a degree is because it is a pure functional element. Because it is pure functional, functioning only to type the clause into a declarative, its distribution is very restricted. Specifically, I propose the following principle:

- (5) *Hen*-Support Principle: If there no is element available to type the clause, insert semantically bleached *hen* to the head of IP.

5. Implication Note that this *hen*-support is the last resort to type the clause (i.e. other clause-typing element would block this *hen*-support). Recall that *hen* in (3) can only be an intensifier. Now we can explain why this is the case. In (3a), the clause is typed by Q, and in (3b) the clause is typed by Neg. Thus, *Hen*-support is blocked (i.e. *hen* cannot be semantically bleached). Consequently the *hen* here cannot merge to IP, head; instead, it is merged to DegP. As a result, *hen* is unambiguously interpreted as 'very'. Let's consider absolute adjectives now. If *hen* is directly merged at the head of IP and has nothing to do with degree, then it is not surprising that *hen* is compatible with absolute adjectives, as shown in (4b). However, when there are other elements typing the clause such as negation or Q, then *hen*-support does not occur. In these cases, *hen* must be incompatible with absolute adjectives. This is indeed this case:

- (22) **Nei ge penzi hen yuan ma?*
 that CL bowl HEN round Q
 Intended 'Is that bowl round?'

- (23) **Nei ge penzi meiyou hen yuan.*
 that CL bowl NEG HEN round
 Intended 'that bowl is not round.'

The compatibility and incompatibility of *hen* and absolute adjectives provide further evidence supporting this *hen*-support approach.

6. Conclusion I follow Grano (2008) that the extra-elements co-occurring with adjectives in Mandarin actually serve to type the clause. However, I argue that the semantically bleached *hen* is directly instantiated at the head of IP as the last resort to type the clause. With this approach, the syntactic and semantic behavior of *hen* receives a consistent account.

Reference

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