

## Construction-determined Interpretations of Mandarin Numeral Phrases as Minimizers

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This paper aims to tease out what determines the interpretations of minimizers in Mandarin Chinese. Mandarin minimizers are numeral phrases: [numeral (*yi* 'one' or *ban* 'half')+ classifier/measure word+ NP]. Based on their interpretations, they can be divided into two groups: non-fixed minimizers and fixed minimizers, as in (1) and (2) respectively. In (1), the classifier has to agree with the following NP; the construction is thus termed non-fixed minimizer. This numeral phrase can have either a literal reading as a regular numeral phrase or an NPI reading. In (2), the classifier, *dian* 'dot', is fixed, not varying with the following NP, so it is termed fixed minimizer. This numeral phrase has only a negative polarity item (NPI) reading. The interpretations of the minimal numeral construction do not always denote quantity. Instead, different elements, such as quantifiers, determiners, and syntactic positions also play a role in shaping the reading of the numeral construction.

The framework of Construction Grammar (Fried & Östman 2004) is adopted here to account for the interpretations of the minimizer constructions. The constructions of fixed minimizers and non-fixed minimizers are different in their (in)definiteness. The (in)definiteness of non-fixed minimizers is not specified and has to be specified by the construction they appear in, whereas fixed minimizers are indefinite and cannot be combined with Determination Construction due to conflicts in semantics.

When the minimizers are coupled with a negation construction, their literal readings with a concrete referent are prohibited because negation evokes a virtual space where the positive conception is backgrounded (Langacker 2009). The minimizer can only be interpreted as a virtual instance of a type, having no status outside the construal. The minimizers with a virtual reading are interpreted as NPIs because they evoke scalar inferences by referring to the bottom of a scale to reach emphatic negation (Israel 2001). On a scale any point above the point where the minimizer refers to is denied, which leads to the pragmatically emphatic function.

The constructional approach further explains the empirical puzzle of the distribution of minimizer NPIs. When the minimizer NPIs are in the fronted-object and subject position, they have to occur with the quantifier *dou* 'all'. The two syntactic positions require a specific reading on indefinites. The quantifier makes minimizer NPIs grounded. The minimizers refer to something earlier in the discourse. In brief, the specificity of minimizers hinges on their collocational constructions.

The interpretations of minimal numeral phrases are constructionally determined, which can be treated as the pairings of form and meaning. The meanings of minimizer phrases are constrained by the constructions they are combined with. Particularly, the cognition of minimizer NPIs requires a virtual space and scalar inferences. The constructional approach straightforwardly accounts for how Mandarin numeral phrases are processed in different syntactic and semantic construals.

### Examples:

- (1) a.      ta        chi        le        ban-ge-pingguo  
              he        eat        asp    half-CL-apple  
              'He ate half of an apple.' (CL: classifier)
- b.      ta        mei        chi        ban-ge-pingguo  
              he        NEG    eat        half-CL-apple  
              'He didn't eat any apple.' (NEG: negation)
- (2) a.      ta        mei        you        ban-dian-chengyi  
              he        NEG    have    half-CL-sincerity  
              'He doesn't have any sincerity.'
- b.      \*ta        you        ban-dian-chengyi  
              he        have    half-CL-sincerity  
              Intended reading: 'He has a little bit of sincerity.'

### References

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