Since the pioneering studies of 陈小荷(1994) and 李宇明(2000), subjective quantity (SQ) has become a new perspective for studying the grammar and semantics of certain Chinese adverbs, including “都”, “还”, “却”, “竟然”, “就”, “才” as well as certain conjunctions, including “即使…也”, “虽然…但是”, “宁可…也不”. For example, the existence of “都” in the following two sentences has induced “二十斤” to become a small and large SQ, respectively:

(1) 他挑二十斤都觉得累。
(2) 他二十斤都挑得起。

Whether “二十斤” means a small or large SQ depends on whether this quantity is directly or inversely proportional to the main predicate of the sentence. In this paper, I will propose a framework to account for the phenomena shown above. As argued in 张亚军(2005), the SQ adverb “都” evolves from the “连...都” construction, a counterpart of the English word “even”, which has been thoroughly studied under the scalar model proposed by Fillmore et al (1988) and Kay (1990). The SQ property of “都” is closely related to the scalar property of “连...都” because both convey the meaning of unexpectedness, or equivalently, low likelihood. I thus propose to model the SQ property by a LIKELIHOOD function, which measures the likelihood of a sentence based on certain parameters arranged in a fraction. For example, the likelihood of (1) and (2) above can be represented by

(3) LIKELIHOOD(“他挑 x 斤觉得累”) = x / 1
(4) LIKELIHOOD(“他 x 斤挑得起”) = 1 / x

The fact that x appears in the numerator in (3) reflects that “x 斤” is directly proportional to the predicate “觉得累”. Now we can use (3) to account for the SQ property of “都” in (1). As pointed out above, “都” conveys a meaning of low likelihood. In order to make the function value in (3) low, x must be as small as possible. This explains why “二十斤” means a small SQ in (1). A similar analysis can be made to account for the large SQ meaning of “二十斤” in (2) by using (4).

The above analysis of “都” can be extended to account for the properties of other SQ adverbs and SQ conjunctions. Most interestingly, the framework of this paper can be used to explain the meaning of certain idiomatic expressions that contain
numerals and overt / covert SQ adverbs, such as the “一…就” construction, etc.

References

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