Discourse Induces Semantic Change: Evidence from a Numeral Phrase Construction in Chinese

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This paper provides evidence that grammaticalization correlates with low discourse prominence (e.g. Boye & Harder, 2012), by describing and proposing an explanation of a semantic change process, witnessed in a (hitherto unstudied) Chinese referring expression (henceforth da-NumP). A canonical NumP has the form of [Num Classifier NP] (Li & Thompson, 1981). In comparison, the da-NumP has the form of [Num da NP], where a morpheme da intervenes between the numeral and the NP. I am concerned with the diachronic meaning change of the da-NumP. I looked into data in the Peking University Center for Chinese Linguistics (CCL) Historical Chinese corpora and identified three types of systematic uses of the da-NumP. Examples (1-3) illustrate the three uses, based on the chronological order in which the first attested examples of each use arise. I cross-checked with CCL’s contemporary Chinese corpora and (Chinese-language) Google and confirmed that the current (and very productive) uses fall within the patterns in (1-3).

(1) [Late Old Chinese, First attested ca. 6 AD]
   a. (Context: Referring to the ten most severe, punishable by death sins out of all the sins, according to a Buddhist classic)
      Shi da zu
      Ten DA sin
      ‘(Roughly) The Ten Big Sins’
   b. (Context: Referring to the four most politically powerful tribes out of all the tribes within a kingdom)
      Si da zu
      Four DA tribe
      ‘(Roughly) The Four Big Tribes’

(2) [Middle Chinese, First attested ca.600 AD]
   (Context: Referring to the three greatest Buddhist temples voted by the public, out of all the temples in the city of Luoyang)
      Luoyang san da ming-si
      Luoyang three DA elite-temple
      ‘(Roughly) The Three Famous Temples’

(3) [Modern Chinese, First attested ca. 19th century]
   a. (Context: The speaker was introduced to four new friends. Noticing they were all pretty brawny, he called them the following)
      Si da zhuang-han
      Four DA muscular-guy
      ‘(Roughly) The Four Muscular Guys’
   b. (Context: The speaker has in mind certain entities that are not in the discourse, and utters the following to introduce them into the discourse, and mention its referents afterwards)
      Jiaru ben-hui xuyao san da yao-su: Shouxian... Qici.... Join our-society need three DA key-condition: First............Then...
      ‘(Roughly) Three necessary conditions are needed to join our society: the first is...the second is....’

Outside of the construction, da is an adjectival modifier denoting bigness. It also denotes certain outstanding properties. The ability to refer to outstanding properties clearly relates to the ranking reading in (1) (Grano & Kennedy, 2012): given the form [Num da NP], NP denotes a background set of entities (i.e. the domain of entities that are quantified over by the numeral) that are ranked via a context-appropriate scale (e.g. the graveness scale of sins). Da picks out the top ||Num|| number of salient entities on the scale (e.g. four largest sins). (2) retains the top ||Num|| ranking reading, as da still picks out the top three most outstanding temples out of a background set of temples. The examples in (3), however, are non-ranking, as the ||Num|| referents are the only individuals in the context that saliently exhibit the property described by NP.

I propose that these uses form a path of semantic bleaching, accompanied by the change in the
relative level of discourse prominence within the expression. I assume that in all utterances, the parts conveying the prioritized message receive primary discourse prominence, and the parts conveying background messages are less prominent (Bundesen, 1990; Sperber & Wilson, 1995; Talmy, 2007; Langacker, 2008). In example (1), [Num da] is primary, since it functions to pick out the top-ranked entities. The NP hosts the background set and receives secondary prominence. Hence,

(4) a) [Num da] is primary in discourse prominence;
b) NP is secondary

In (2), the ranking reading is retained. However, rather than describing the background set, the NP in (2) exclusively characterizes the top-ranked entities, by assigning a discourse-new property to them (here ming-si ‘elite temple’). I propose that, at (2)’s stage, the da-NumP encodes a dynamic process, where, in the prior information state, the salient top-ranked entities are picked out/introduced into the discourse, then a new information state replaces the prior state and updates the discourse structure with new information on these entities (Lascarides & Asher, 1991; Asher & Lascarides, 1995). Accordingly, the discourse configuration is reshuffled:

(5) a) The update process (hosted by the NP) becomes primary in prominence;
b) The ranking process becomes secondary;
c) The previously secondary background set becomes further demoted (since the update process doesn’t ‘access it and only operates on the salient entities).

This causes the background set to be ousted (Traugott 1988; Boye and Harder 2012) from surface realization, which I believe ultimately leads to the total loss of its semantic substance: because the background set is not overtly realized, and only the salient entities that are the outcome of the ranking process feeds into the characterizing process, ultimately the semantic content of the background set is lost. I believe that this explains the development of non-ranking uses in (3). In (3a), da marks any ||Num|| entities that are salient from discourse. In (3b), da marks the ||Num|| referents that are to be introduced into discourse and will be relevant for discussion in the subsequent discourse. In both cases, I believe that da’s function is then reanalyzed as simply highlighting ||Num|| discourse-salient entities accessible from contexts, which enables a discourse-new property to characterizes these entities.

Thus, this case study offers new insights into the functionalist explanations of semantic bleaching (Givon, 1979; Hopper, 1991; Hopper & Traugott, 2003), by providing a detailed account of how the grammar-discourse inter-dependence leads to structural and functional change of a morpheme. It also supports the view that the loss of a certain linguistic unit’s semantic substance should not be understood in isolation, but in terms of the lowering of its prominence status relative to other materials in the environment.

References