## Cartographic Study on the Functional Hierarchy of Complex Word Revealed by Tone1 Sandhi in Chinese Adjective

Shangqi Liu Faculty of Linguistics, Philology & Phonetics, University of Oxford liushangqi89@163.com

Many existing studies on word formation have been conducted from perspectives of Lexical Semantics or Construction Morphology. Despite the acknowledged similarities between morphology and syntax, few studies probed into words that share the same formative mechanism with phrases from a syntactic perspective. Si (2012, 2014, 2022) clarified the notion of 'complex word' and proposed a unified model under cartographic approaches, which succeeded in accounting for tonal changes, reduplication, zero-morphology, etc. However, it remains unknown whether hierarchies exist in those regulators that shift categories.

There are vivid forms of adjectives in Chinese, especially Beijing colloquial Mandarin e.g., AA, AABB, AXYZ, where Tone1 sandhi can take place optionally (Lv, 1999:716). The formation of these words involves affixation, reduplication, and tonal change, thus becoming the ideal object to investigate the internal functional hierarchies of complex words. Based on this, we adopt the cartographic approach to focus on the formative mechanism of tone1 sandhi in Chinese adjectives and hope this attempt would deepen the construction of the theoretical model of complex words.

We hypothesise that several regulators which hold different positions in the functional hierarchies of complex words are involved in the formation of tone1 sandhi in Chinese adjectives. Description regulator (Des) syntactically distinguishes adjectives under discussion from quality adjectives. Reduplication (Red) and affixation regulator (Aff) are evidenced by the forms of AABB and AXYZ. Entailed sandhi proves the existence of Prominence regulator (Prm) and Tone-modifying regulator (Tmo). The syntactic positions of these regulators are revealed as follows: the optionality and entailment of the sandhi suggest Tmo>Prm>Des ('A>B' means A holds higher position than B) whilst morphology in both Zhongyuan Mandarin and Nasu language implies Aff>Red. Descriptive meanings illustrate Des>Aff. To recapitulate, the functional hierarchies of complex words are stated as Tmo>Prm>Des>Aff>Red.

By specifying the functional categories of complex words, we propose a refined model to account for the sandhi, formation, and syntactic performances of the vivid forms of adjectives. In this paper, we also emphasise the necessity of the description regulator and the register-driven movement. Apart from category shift, the register is also a driving force for the movement. The strong feature [+Colloquial] carried by Tmo and Prm motivates the constituent to move up.

**Keywords**: complex word; cartography; functional hierarchy; register