

The Mandarin Chinese particle *le* presents a persistent analytical challenge due to its diverse syntactic distributions, functioning both as a postverbal perfective aspect marker (verb-*le*) and as a sentence-final marker of change of state (sentence *le*). While traditional grammarians have extensively documented its semantic interpretations and discourse functions, generative syntacticians have also investigated how to reconcile their surface positions with theoretical frameworks, such as positing functional projections and TP-raising movement. However, such analyses often introduce structural complexity and are difficult to implement efficiently in rule-based or hybrid AI systems. To address these limitations, this study proposes a unified lexicalist and realizational analysis within the framework of Sign-Based Construction Grammar (SBCG). Specifically, the particle *le* is reanalyzed as distinct morphological realizations of paradigmatic cells within a single lexical entry. This approach not only provides a linguistically constrained account of its dual behavior but also facilitates computational modeling of complex particle systems in Mandarin Chinese.

By integrating Paradigm Function Morphology with valence structures modelled in SBCG, the core proposal is that the two functions of the particle *le* are realizations of a single lexeme that differ in their paradigmatic cell specifications: perfective aspect [PRF +] and change-of-state [COS +]. Instead of positing multiple lexical items or syntactic movement operations, the proposed analysis models these features as morphosyntactic property sets within a paradigm, with cells realized through distinct constructional rules in SBCG. For verb-*le*, a rule maps a verb phrase to an aspect phrase, yielding a perfective interpretation whose precise semantic contribution is determined compositionally by the situation type of the verb constellation. In contrast, sentence *le* selects a saturated clause and then projects a higher-level structure expressing a change of state. Crucially, the surface positions of verb-*le* and sentence *le* are derived through a paradigmatic realization of phonological exponence, avoiding the need for syntactic movement. This approach also naturally captures cases in which verb-*le* and sentence *le* co-occur within a single sentence, treating them as successive realizations of distinct paradigm cells rather than as syntactically competing components.

Situating the particle *le* within a formal, constraint-based paradigmatic framework allows this study to offer a principled explanation of its dual syntactic and semantic behavior without resorting to derivational operations. This analysis also further demonstrates the flexibility of paradigm morphology and SBCG in modeling lexicalized syntactic exponence in languages with sparse inflection, such as Mandarin Chinese. More broadly, by offering an explicit, lexically grounded representation of the particle *le*, this study establishes a solid foundation for developing more robust and interpretable NLP systems that handle Chinese aspect and sentence-final particles with greater accuracy and linguistic consistency.

Keywords: Chinese particle *le*; Lexicalist analysis; Paradigm Function Morphology; Morphosyntactic interface; Computational modeling