On the Syntax of Postverbal Modals and their Potential Verbal Bases

Chinese exhibits its typological property, analyticity, at all levels and provides a good perspective to the syntactic-semantic correspondence under the cartographic approach (Rizzi 1997; Cinque 1999). Through the comparative study of Mandarin Chinese and Hakka dialect, this paper presents a syntactic account for the postverbal modals and their potential verbal bases, investigating the selectional relationship as well as (a)symmetries among those alternatives both associated with core syntactic-semantic requirements. A fine-grained structure of modals is offered to empirically capture the restrictions on postverbal modals differing in their bases, and to theoretically illustrate the robust system of light verbs, which is crucial to influence the modality sources denoted by the postverbal modal construals.

Postverbal modals, Mandarin *de* and Hakka *tet* in (1), have long been known and discussed in the literatures, since both raise a language-internal divergence in SVO languages that modals typically occur in the preverbal position with this one exception. Things attract more attention when we consider Hakka dialect: the postverbal modal *tet* could be realized as two variations at the surface, leading to two-layered modality, namely dynamic modality in (1a) [V-Mod-Res] and deontic modality in (2b) [V-*tet*]. Additionally, deontic *tet* has another alternative as (2c) [v-Mod V] if a light verb is overtly realized as *zo* ‘do’ (Huang 1997 for Mandarin). This one-step distinction causes serial asymmetries between two alternatives, derived by the V-to-v-Mod movement or v-to-Mod movement (Chung 2014).

(1) a. Zhangsan  **he-de-wan** na-guan pijiu. (Mandarin)
   Zhangsan drink-DE-RES that-CL beer
   ‘Zhangsan can [will manage to] drink off that bottle of beer.’

b. Amin  **lim-tet-het** ge-gon bilu. (Hakka)
   Amin drink-TET-RES that-CL beer
   ‘Amin can [will manage to] drink off that bottle of beer.’

(2) a. Amin  **siid-tet-het** ng-von fan. (Dynamic: V-Mod-R)
   Amin eat-TET-RES five-CL rice
   ‘Amin can [will manage to] eat five bowls of rice.’

b. Amin  **siid-tet** ng-von fan. (Deontic: V-Mod)
   Amin eat-TET five-CL rice

  ‘Amin can [is permitted to] eat five bowls of rice.’

c. Amin  **zo-tet siid** ng-von fan. (Deontic: v-Mod V)
   Amin DO-TET eat five-CL rice
   ‘Amin can [is permitted to] eat five bowls of rice.’

A system of light verbs in Mandarin and its dialects has overt counterparts, due to the analyticity of Chinese, therefore raises more interesting issues about the potential verbal bases of this postverbal modal, *tet*. A straightforward prediction is that other overt light verbs in Hakka are qualified as candidates. Fortunately, this possibility is attested by (3):

(3) a. Amin  **siit-tet siid** ng-von fan. (Deontic: **CAUSE**-Mod V)
   Amin CAUSE-TET eat five-CL rice

b. Amin  **tung-tet siid** ng-von fan. (Deontic: MOVE*-Mod V)
   Amin MOVE-TET eat five-CL rice
   ‘Amin can [is permitted to] eat five bowls of rice.’
Moreover, compared with dynamic modality expressed by Mandarin *de* in V-*de*-R, these variations of Hakka deontic *tet* consistently deliver the permission modality, but differ in the source of modality. The modality tends to be conveyed by *sii-tet* V if the permission comes from an authority. In addition, the subject restriction seems with respect to the light verb base. Thus, the inanimate subject is prohibited in *tung-tet* or *zo-tet*, owing to *tung* ‘move’ and *zo* ‘do’ as typical introducer of a Performer and an Agent, respectively. This asymmetry in (4) is just an apparent counterexample to the feasibility of light verbs serving as modal bases, and offers a clearer perspective on argument structure of postverbal modal construals, leading to a better understanding of the source of permission as well as syntactic distribution of Hakka *tet* being sensitive to its verbal base.

(4) a. fablida guitin siibbad se sii-tet siij jiu. (Deontic: law stipulate eighteen years old CAUSE-TET eat alcohol CAUSE*+Mod V)
   ‘It is permitted to drink alcohol over eighteen years old by law.’

b. *fablida guitin siibbad se zo-/tung-tet siij jiu. (Deontic: law stipulate eighteen years old DO-/MOVE-TET eat alcohol DO*/MOVE*+Mod V)

Drawing the interaction between the modality source and the subject restrictions, the proposed structures are illustrated in (5): the light verb, *sii* ‘cause’ and *tung* ‘move’, on a par with *zo* ‘do’ serves as a potential verbal base of modal, *tet*. *Tung* ‘move’ stands as the introducer of a Performer and an Agent relies on *zo* ‘do’, leading to the subject animacy requirement. An authority within the *sii-tet* V construal is introduced by *sii* and occurs at the specifier of SAP (Speech Act Projection, Uriagereka 1995; Rizzi 1997) as the permissive modality source. Furthermore, the counterpart involved an implicit light verb, V-*tet*, shows respect to constraints on what detected in those taking explicit ones.

(5) a. [IP Subject] [MPdeo [V-V] –tet [VP t_k [v· t_j [VP t_i]]]]] V-*tet*

b. [IP Agent] [MPdeo zo*i*–tet [v· t_j [v· t_i [VP V]]]]] DO*/tet* V

c. [IP Performer] [MPdeo tung*i*–tet [VP t_j [v· t_i [VP V]]]]] MOVE*/tet* V

d. [SAP Authority] [IP Subject] [MPdeo sii*i*–tet [sii t_k [v· t_i [VP V]]]]] CAUSE*/tet* V

To recap, this paper from a comparative perspective scrutinizes the notable relationship between postverbal modals and their verbal bases. This analysis, if on the right track, not only empirically captures the contrasts in the permissive modality source and subject selection, but is advantageous in: (i) the interaction with rigid-hierarchically merged adverbs under the cartographic approach, provides a piece of empirical evidence for the syntactic-semantic constraints on the selectional relation tied a proper (light) verbal bases to the postverbal modals. (ii) Other differences within those alternatives of postverbal modals, as the formulation of A-not-A questions and the rhetorical questions, are also closed related to which verbal base token. (iii) Cross-linguistically, the selectional relationship are attested in Taiwan Southern Min, leading to the alternatives of postverbal modals and their modality source distinction demonstrated in (5). (iv) The most desirable consequence is that theoretically, this study of postverbal modals and potential verbal bases opens a window to a high analyticity, the characteristic property of Modern Chinese (Chao 1968; Huang 2005).