On de/bu and the Syntactic Nature of Resultative Verbal Compounding
Ching-Huei Teresa Wu—McGill University

Resultative Verbal Compounds (RVCs) in Mandarin are composed of two verbal components, namely V1 and V2, and together they convey a TELIC event consisting of two subevents, a PROCESS (activity) and RESULT (state) denoting by V1 and V2 respectively, as shown in (1). Generally, no elements can intervene between V1 and V2. However, two particular morphemes can—de and bu, the so-called “potential modes” expressing “capability” of the Agent/Causer, as shown in (2). Sentences like (2) productive and are compared with deontic modals neng/bu-neng “can/cannot” as in (3):

(1) Lisi kan-dao(-le) zhe-ke shu Lisi chop-fall-ASP this-CL tree
“Lisi chopped the tree down.”
(2) Lisi kan-de/bu-dao zhe-ke shu Lisi chop DE/BU-fall this-CL tree
“Lisi is/is not able to chop the tree down.”
(3) Lisi neng/bu-neng kan-dao zhe-ke shu “Lisi can/cannot chop the tree down.”
Lisi can/cannot chop-fall this-CL tree

Semantically (2) and (3) are synonymous. Four factors can endorse the semantic equivalence of them: (i) both express IRREALIS and are incompatible with perfective –le or experiential -guo; (ii) both have scope over either V2 or the whole compound; (iii) both the negative elements bu and bu-neng behave similarly in licensing negative polarity items (NPIs) in only object; (iv) in some dialects, such as Taiwanese, both even have the same phonological form, e/be.

Resultative Constructions (RCs) in some other languages, like some Kwa languages spoken in West Africa such as Igbo and Edo, show not only VVCs (Igbo) but also SVCs (Edo) on the surface:

(4) obi kwá-da-* (ra) ézè I GBO
Obi push-fall-rV Eze (VVC)
“Obi pushed Eze down.”
(5) òzó sùá ògó dé EDO Ozo push bottle fall (SVC)
“Ozo pushed the bottle down.”

Despite the difference word orders on the surface, Mandarin, Igbo and Edo in general do not allow any adverbs, negation, or any overt functional projections (Tense/Aspect) to intervene between V1 and V2. The occurrence of de/bu in between V1 and V2 as well as the synonymous relationship between (2) and (3) show that de/bu and the formation of RVCs are somehow related. I propose that de/bu are an indication of an inner functional head F licensed by Modal and generated between V1 and V2. F and Modal are syntactically separated but semantically correlated projections. The relationship between them is established via operator binding and has to associate with locality restrictions. I posit that the existence of functional categories contains a parametric value that is pertinent to the formation of RVCs. I argue Mandarin RVCs are syntactically derived by verb movement and, following Huang (1994), Tang (1998), among others, the verbs undergo short movement inside vP in syntax.

Although (2) and (3) are synonymous, syntactically they exhibit very different behavior when interacting with manner adverbs, passive sentences and ba-constructions, as indicated in (6), whereas sentences with neng/bu-neng work perfectly in these three constructions, as illustrated in (7):

(6) a.* Lisi manman-de kan-de/bu-dao zhe-ke shu Lisi neng/bu-neng manman-de kan-dao…
Lisi slow-ly chop-DE/BU-fall this-CL tree Lisi can/cannot slow-ly chop-fall...
“Lisi is/is not able to slowly chop the tree down.”
(7) a. Lisi (* zixi-de) kan-bu-kan zhe-ke shu Lisi (* zixi-de) kan-dao…
Lisi this-CL tree chop-DE/BU-fall Lisi chop-fall
“Lisi is/is not able to chop the tree down.”

Interestingly, the quantification of adverbial quantifier dou “all” over regular plural NPs and Mandarin A-not-A questions, a type of disjunctive yes/no questions, also display similar blocking phenomena when interacting with the three constructions, as shown in (8) and (9) respectively:

(8) a. tameN zixi-de (*dou) kan-le zhe-ben shu (9) a. Lisi (*zixi-de) kan-bu-kan zhe-ben shu
they carefully all read-ASP this-CL book
“All of them read that book carefully.”

Lisi carefully read-not-read this-CL book
“Does Lisi read this book carefully or not?”

b tamen *dou ba* zhe-ben shu (*dou) kan-le
they all BA this-CL book all read-ASP
“All of them read that book.”

Lisi *ba zhe-ben shu kan-bu-kan
Lisi BA this-CL book read-not-read
“Does Lisi read this book?

With b.* Lisi read-not-read this-CL book
“Was the book read by Lisi?”

c zhe-xie shu dou bei Lisi (*dou) kan-le
those book all BEI Lisi all read-ASP
“Those books were read by Lisi.”

Lisi bei zhe-ben shu kan-bu-kan
“Was the book read by Lisi?”

Cheng (1995) maintains that *dou* is an adverb playing a distributor in quantification which has to satisfy a locality restriction. The ungrammaticality in (8) is attributed to locality constraint of *dou*-quantification. Huang (1982, 1991) proposes that the constituent [A-not-A] is a feature [+Q] generated on INFL. [+Q] undergoes LF movement/QR and has to obey strict locality requirements. Ernst (1994) argues that [+Q] is generated on the verb and the LF movement is sensitive to core adjuncts. The ungrammaticality of (9) is a violation in locality constraint and manner adverbs, bei-phrases and ba-phrases again play blocking roles.

Considering the parallel blocking effects of *de/bu* in (6), I propose that *de/bu* are generated between V1 and V2 as a functional head F licensed by associated Modal *neng/bu-neng* and the same kind of operator-like binding relationship and a strict locality constraint as those of (8) and (9) are involved. The inability of *de/bu* occurrence in (6) suggests that the sentences syntactically violate Relativized Minimality and manner adverbs, bei-phrases and ba-phrases are the blockers preventing the correlation of *de/bu* and *neng/bu-neng*. I argue that structurally F and Modal are separated as different heads. This is evidenced by the fact that F *de* can co-occur with the Modal, as shown in (10):

(10) Lisi *neng/bu-neng kan*-*de/bu*-dao zhe-ke shu “Lisi is/is not able to chop the tree down.”

Lisi can/cannot chop -DE/BU- fall this-CL tree

Stewart (1998) maintains that languages underlyingly originate from Serial Verb Constructions (SVCs) in RCs. The occurrence of VVCs is attributed to the verb being attracted by strong INFL, the Tense –ra in (4). Languages with SVCs like (5) are the result of a poor inflectional system. However, Mandarin poses a problem for the argument: it lacks a rich morphology; nevertheless, it exhibits obligatory VVC. Tense is unlikely the trigger of verb movement in Mandarin. On the other hand, Chinese verbs do undergo “short” movement but they do not move out of vP (Huang (1994), Tang (1998)). F functions as a kind of closure of the open range of V1 (Sybesma (1992) and Tang (1997)). I propose that Mandarin RVCs are derived in syntax by head movement from the underlying SVCs, nevertheless, the movement occurs within vP. The inner functional projection F posed above could explain the extraordinary behavior of Mandarin RVCs and further contribute in offering parametric generalization for the relevant structures in RCs of different languages. Moreover, the proposals give a right direction that the formation of RVCs is through syntactic derivation.

References