

The Verbal Constraints in the Chinese *qilai* Middle Construction

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Abstract: The verbal constraints in the middle construction have been hotly debated in the literature. The most prominent representatives include four approaches: the affectedness approach (Roberts 1987; Hoekstra & Roberts 1993), the aspectual approach (Fagan 1988; 2009), the generative lexicon approach (Bassac & Bouillon 2002) and the theta system approach (Marelj 2004). However, none of them is proved to be valid to capture the verbal constraints in Chinese *qilai* middle construction. The study proposes that manipulability and durability of a verb are decisive in determining the verb's admissibility into the *qilai* middle construction. Diagnostically, the delimitative aspect can serve as a check point for a verb's manipulability, by virtue of the verb reduplication or immediate right-attachment of *yixia* to a verb.

Keywords: The verbal constraints, Chinese *qilai* middle construction, Manipulability, Durability, the Delimitative Aspect, Verb Reduplication

1. Introduction

This paper explores the verbal constraints in Chinese *qilai* middle construction. Before proceeding to the Chinese data, we firstly review four approaches to the verbal constraints in the middle construction, including the affectedness approach (Roberts 1987; Hoekstra & Roberts 1993), the aspectual approach (Fagan 1988; 2009), the generative lexicon approach (Bassac & Bouillon 2002) and the theta system approach (Marelj 2004).

(1) The Affectedness Constraint: (Roberts (1985))

Affected objects can be promoted under MF.

(MF refers to the middle formation.)

Leaving aside its validity, the most obvious deficiency in its application is about how to determine whether an object is affected or not. As Hoekstra and Roberts (1993: 201) admit, "affectedness" is understood in some intuitive sense, which reduces its feasibility in a formal way.

(2) The Aspectual Constraint: (Fagan 2009: 68)

Only (transitive) activities and accomplishments form acceptable middles.

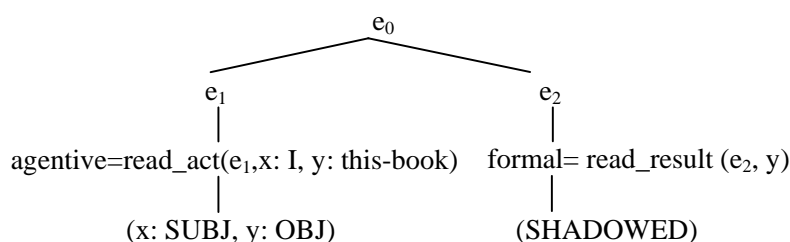
This approach is mainly based on Vendler's (1967) division of English verbs into four categories, i.e. activity, accomplishment, achievement and state, along the line of their aspectual properties. But the indeterminacy of the actual membership for some verbs has been noticed in the literature (Vendler 1967; Marelj 2004; Fagan 2009). Besides the multi-class membership problem, (2) encounters direct counter-examples, i.e., the achievement verb *break* is attested in the middle construction as '*The vase breaks easily*' (Marelj 2004: 167). In French, the state/achievement verbs are able to appear in the middle construction, like *voir* (see)¹ in '*La Tour Eiffel se voit de loin*' (The Eiffel Tower can be seen from afar) (Zribi-Hertz 1982: 348). Therefore, (2) seems to be invalid.

(3) The Generative Lexicon Approach to Middle Formation: (Bassac & Bouillon 2002: 38)

The transitive verb must be an accomplishment.

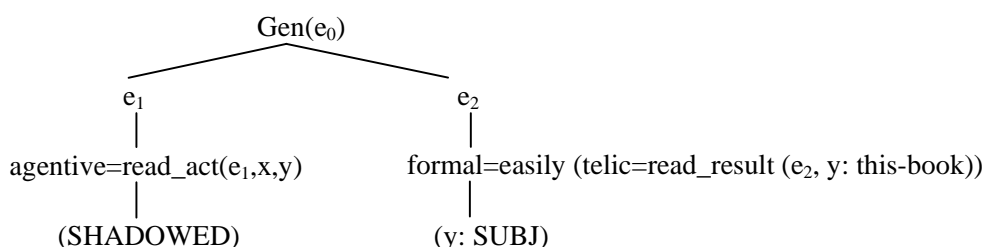
Under the framework of the Generative Lexicon, the middle construction is understood as “a projection of the final state made possible only by the forced shift of the head from the initial sub-event to the final state” (Bassac & Bouillon 2002: 42). This middle construction definition requires its verb to have a left-headed complex event structure, and the middle formation forces its head to shift to the final state. This is illustrated below:

(4) a. The event structure of the active verb *read* in '*I read this book*': (Bassac & Bouillon 2002: 38)



¹ As Vendler (1967: 110) noted that “it is difficult to determine what category verbs like *think*, *know*, *understand*, *see*, and *hear*, ‘originally’ belongs to”. But the fuzziness is between achievement and state categories, both of which are claimed to be excluded from entering the middle construction, according to (2).

- b. The event structure of the middle verb *read* in ‘*The book reads easily*’: (Bassac & Bouillon 2002: 38)



This approach places crucial importance of verb type judgment on a verb's event structure. An accomplishment verb differs from an activity verb in that the former has a complex event structure while the latter a simple event structure. For example, the verbs *read* and *use* belong to an accomplishment verb and an activity verb respectively, which determines their contrastive behaviors in the middle construction. However, this approach still has several problems. Firstly, the verb classification seems to be intuitive and idiosyncratic, since no formal diagnostic is proposed. Secondly, this approach cannot explain the acceptability of achievement verbs (encoding right-headed complex event structures) in the middle construction. Bassac & Bouillon (2002: 45) are forced to loosen the verbal constraints in the middle construction by admitting 'achievements should then potentially accept middle constructions'.

(5) The Theta System Approach (Marelj 2004: 179)

A verb is visible to the LMF iff its verbal concept contains a $[/+c]$ role.

(LMF refers to Lexical Middle Formation.)

In the Theta system (Reinhart 2002)², the $[/+c]$ feature is compatible with cause, agent and instrument roles. The approach is superior to the thematic role stipulation in that it successfully explains the unacceptability of verbs, i.e., *escape* and *wonder*, in the middle construction. The two verbs behave in a very similar way with agentive verbs but they are proved to lack of the $[/+c]$ feature (see Marelj (2004) for details). However, the test of the presence of $[/+c]$ feature is by no means formal, since Reinhart (2002: 12) points out that "causality (unlike entailment) is not a logical relation, but it is a relation imposed by human perception on the world". For example, the agentivity test, as Marelj (2004) adopts for her judgment of the verb *wonder*'s lack of $[/+c]$ feature, may lead to an opposite result when the verb *escape* (which is also claimed to be void of $[/+c]$ feature (Reinhart 2003; Marelj 2004)) is targeted. This is shown in (6).

² Lexical entries are coded through two binary features $/c$ (cause change) and $/m$ (mental state), whose compositions constitute contents of theta grids of a verbal entry. The two features bear a componential relation with the thematic roles. For example, the feature clusters $[/+c]$, $[/+c+m]$, $[/+c-m]$ are associated with cause, agent and instrument, respectively. A comprehensive list on the correspondence relation between the feature clusters and the thematic roles is offered in Reinhart (2002) and Marelj (2004).

- (6) a. I *deliberately/*intentionally wondered about the question. (Marelj 2004: 40)
 b. Max deliberately escaped Mary/the police/the tornado. (Marelj 2004: 65)

Therefore, the [+c] feature is somehow opaque and thus less operative to be extended to Chinese verb classification. In the next section, data of Chinese *qilai* construction are to be presented.

2. Chinese *Qilai* Middle Construction

The middle status of the *qilai* construction has long been recognized (Sung 1994; Lin 2008; among others).³ As for its verbal constraints, none of the approaches under review is proved to be effective. In the *qilai* middle construction, both inter-linguistic (e.g. *break* versus *dapo*) and intra-linguistic (e.g. *lijie* versus *dong*) synonyms exhibit grammaticality contrasts, exemplified in (7) and (8).

- (7) *Zhe ge huaping dapo qilai hen rongyi.
 the CL vase break QILAI very easy
 Intended meaning: 'The vase breaks easily'.
 (8) Zhe ge wenti lijie/ *dong qilai hen rongyi.
 the CL problem undertand/understand QILAI very easy
 'It is easy to understand this question.'

In order to work out the reasons for the asymmetrical behaviors of inter- and intra-linguistic synonyms, we firstly resort to those criteria in section 1, which are diagnosed in (9) and (10). (The diagnostics are from the original sources of the above approaches.)

- (9) a. *Wo zhengzai dapo beizi.
 1SG PROG break cup
 b. Wo guyi dapo le beizi.
 1SG intentionally break ASP cup
 'I broke the cup intentionally.'

³ Thank one of the reviewers for offering a *qilai* example from <http://wenwen.soso.com/z/q39733571.htm>, quoted as follows:

- (i) Weishenme xuehua bi bing ronghua qilai man?
 why snow BI (comparative) ice melt QILAI slow
 'Why does the snow melt more slowly than ice does?'

Since the word *qilai* is highly versatile in Chinese, not all the theme-as-subject *qilai* sentences can be subsumed under the middle construction. The sentence (i) is excluded from the middle construction, since it is a one-place predicate without an agent. The definition and the diagnostics of the middle construction are beyond the scope of this paper. Please refer to Marelj (2004) for details in this respect.

- c. Wo ba beizi dapo le.
1SG BA cup break ASP
'I broke the cup.'
- (10) a. Wo zhengzai ⁷⁹lijie/*dong zhege wenti.
1SG PROG understand/understand the-CL question
b. *Wo guyi lijie/dong zhege wenti.
1SG intentionally understand/understand the-CL question
c. *Wo ba zhege wenti lijie/dong le.⁴
1SG BA the-CL question understand/understand ASP

The diagnostic results show that *dapo* is an achievement verb and it encodes the [+c] feature. In addition, the affectedness of its object is semantically obvious, which is also linguistically corroborated in its appearance in the *ba* construction (Sybesma 1992).⁵ These test results, coupled with *dapo*'s inability to enter the *qilai* middle construction (see (5)), indicate that the aspectual constraint (2) is apparently effective at this point. As for the *lijie/dong* pair in (10), they should belong to achievement or state verbs and they show no [+c] feature. Intuitively, the object of them may not be affected. In view of the above approaches, we have every reason to exclude both *lijie* and *dong* from the *qilai* middle construction. Contrary to the prediction, *lijie* is perfectly acceptable in the *qilai* middle construction, as shown in (8). Therefore, both the inter-linguistic and intra-linguistic examples force us to search for a more effective (bunch of) verbal constraint(s) to explain Chinese data.

3. The Proposed Solution: Manipulability and Durability of a Verb Matter Most

The contradictory testing results in section 2 show that lexical items are not invariably encoded across languages and thus we need to explore language-specific diagnostics to tease out the core properties which are truly responsible for the verbal admission into the middle construction.

⁴ The grammaticality of (8c) can be improved by adding a resultative word *qingchu* to *lijie*. But this rescue method fails for the predicate *dong*.

- (i) Wo ba zhege wenti lijie qingchu le.
1SG BA the-CL question understand clear ASP
'I have understood this question.'
- (ii) *Wo ba zhege wenti dong qingchu le.
1SG BA the-CL question understand clear ASP
Intended: 'I have understood this question.'

The addition of a resultative component to the predicate to improve the grammaticality of *ba* construction has been explained in different ways. Please see Li & Thompson (1982), Sybesma (1992) and Feng (2002) (among many others) for details. Pertinent to our discussions here is that *dong* is more result-encoded than *lijie*, although they behave in a quite similar way in the above tests. Despite this distinction, *lijie* still cannot be considered as a canonical activity or accomplishment verb, since it fails the standard tests for the two memberships, as (8a, b) illustrate.

⁵ It is worth noting that the diagnostic results of *dapo* cannot extend to other VR ("verb+resultative" pattern) verbs, i.e. *xuehui* (learn-understand). VRs are actually heterogeneous in the above-mentioned grammatical features, although they collectively show their incompatibility with the *qilai* middle construction.

This study proposes that the decisive factor of verbal constraints in Chinese *qilai* middle construction lies in the manipulability and durability of a verb. This proposal is more on a par with the theta system approach which places the importance to a verb's [+c] feature. I intentionally avoid the more frequently used terms, e.g. causativity (Reinhart 2002) or agentivity (Roberts 1987), since the established diagnostics of them have been proved invalid for Chinese data. Therefore, the inheritance of the terms may lead to confusion. The adoption of manipulability is hopefully to be more accurate. Durability is secondary to manipulability for two reasons. Firstly, the two concepts correlate in that only a durable action can be manipulated by an actor (c.f. Roberts (1987) for his statement that only activities and accomplishment have external arguments). Contrastively, a result at a specific point is hardly conceived to be controllable, except when it is used metonymically⁶. Secondly, a large number of durable Chinese verbs (with the modification of (*zheng*)*zai*, *zhe* etc.) do not exhibit manipulability at all. For example, most state verbs (e.g. *ai* (love) and *hen* (hate)) are durable but non-controllable.

In terms of the diagnostic of manipulability, the demilitative aspect (Li & Thompson 1982) is proved to be effective. The delimitative aspect is defined as “doing an action ‘a little bit’, or for a short of time” (Li & Thompson 1981: 232) and it is realized through verb duplication and/or adding the word *yixia* to a verb at issue. Along the same line, if a verb (other than one-place verbs)⁷ allows the reduplication or the immediate attachment of *yixia*, the verb at issue can potentially form a felicitous *qilai* middle construction, under appropriate contexts. This diagnostic is illustrated in (11).

- (11) a. *Ni **dapo dapo/dapo yixia** zhege beizi.
 2SG break break break YIXIA the-CL cup
 b. *Ni **dong dong/ dong yixia** zhege wenti.
 2SG understand understand understand YIXIA the-CL problem
 c. Ni **lijie lijie/ lijie yixia** zhege wenti.
 2SG understand understand /understand YIXIA the-CL problem
 ‘You (should) try to probe into and understand this problem.’

The test results in (11), coupled with the verbs’ (dis)allowance into the *qilai* middle construction in (7) and (8), corroborate our proposal. The free translation of (11c) reveals the manipulability of the verb *lijie*, although it defies the modification of *guyi* (intentionally), shown in (10b). In this sense, (11c) can be roughly paraphrased as “the agent “you” does something to reach the status of *lijie* (understand) the patient “this problem””. The exclusion of *guyi* (intentionally) may rest in the fact that, in the case of *lijie*, the agent’s efforts serve as a base to profile the resulting status of understanding (Langacker 1991). Contrastively, the verb *dong*

⁶ The imperative sentence “Be happy” adopts the state verb which is used metonymically to imply an action. This sentence can be understood as “You should do something to stay happy”. See Li (2004) for the detailed analysis of metonymy of this sort.

⁷ According to the definition of the middle construction (Marelj 2004; Fagan 2009), the potentially permissible verbs normally require more than one argument, except in the adjunct middle construction (Marelj 2004). For the sake of space limit, this paper is confined to core (non-adjunct) middle construction, which therefore excludes one-place predicate. This condition correctly predicts the non-admission of verbs e.g. *xiao* (laugh), *ku* (cry), *kaixin* (be happy) etc. (which are normally subsumed under the name of unergative verbs) in the middle construction.

encodes the resulting status only, without any profile to guarantee/ elicit the manipulation of an agent. In the Generative Lexicon's terms, *lijie* is a right-headed complex event while *dong* is a state-encoding single event.

As for the durability, although it is secondary to manipulability, it is still operative. For example, the verb *mai* (to buy) is subject to manipulation but this action is more instantaneous than durative in the sense that the action is hardly repeated on the subject (a piece of commodity in this case). Therefore, the verb *mai* is highly restricted in the *qilai* construction. For example, only a kind-referring subject, in contrast with an object-referring subject, is acceptable. This is shown in (12a, b).

- (12) a. *Zhe tao fangzi mai qilai hen huasuan.
 the CL flat buy QILAI very cost-efficient
 Intended: 'It is cost-efficient to buy this flat.'
 b. Jizifang mai qilai hen huasuan.
 subsidized houses buy QILAI very cost-efficient
 'It is cost-efficient to buy the subsidized houses.'

In a sum, the study ascribes two properties to potentially felicitous Chinese verbs in the *qilai* middle construction: manipulability and durability.

4. Conclusion

Firstly, this approach can explain non-uniform verb constraints in the middle construction cross-linguistically. Manipulability and durability are differently encoded in the intra- and inter-linguistic synonyms. For example, the verb *use* in English denies manipulation (non-agentive in B & B's term, 2002: 39) while *shiyong* (to use) in Chinese is manipulable. The contrastive properties explain their compatibility and incompatibility with the middle construction, respectively. Secondly, the approach avoids the inelegant treatment of achievement verbs in the middle construction. The manipulable achievement verbs are acceptable in the middle construction, although most achievement verbs defy any manipulation. Thirdly, the durability feature, albeit secondary, help guarantee a verb's admission into the middle construction.

To conclude, the verbal constraints of Chinese *qilai* construction lie in the manipulability and durability of a verb at issue, which can be diagnosed through the acceptability of its verbal reduplication and/or the immediate right-attachment of "yixia".

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