

Applicatives Not Applicable: Evidence from Mandarin DOCs

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Abstract. Applicatives have received intense discussion since they were proposed in 20 centuries. This paper pointed out some major issues in the theoretical implication and empirical application of the applicative theory. Extra supporting data were raised from Mandarin DOCs. Furthermore, instead of assuming an additional rule of permitting one verb taking two objects, this argued that Mandarin indirect passives transformed from DOCs and resultatives were both derived from the Bi-verbal underlying structure, but with different argument arrangements.

Keywords: Applicatives; Indirect Passives; Mandarin DOCs; Bi-verbal Construction.

1. Introduction

From a typological perspective, the applicative construction is predicated by a verb which takes a specific morpheme licensing an oblique or non-core argument that would not otherwise be considered a part of the verb's argument structure. In other words, the applicative construction arises from a derived verb form that introduces a new object argument to the base verb [1].

It is well acknowledged that the applied verb form is the only grammatical means for introducing these semantic arguments of the verb. In Kichaga there are only applicative affixes available to mark non-core arguments. In other languages, for instance in Chicheŵa, it has a preposition for instruments and (arguably) another for recipients, but it lacks prepositions for oblique beneficiaries and locatives. By extension, it is proposed that English DOCs are applicative constructions as well, with non-overt applicative markers [2].

Applicative structures have received widely discussed in Mandarin as well. In some studies, applicatives were argued to function well in some constructions of Mandarin, particularly in Mandarin DOCs [3]. In this paper, we pointed out some serious theoretical and empirical problems of applying the applicative theory in Mandarin DOCs, and argued that applicative constructions were not perfect yet and lack of self-sufficiency in theory. In addition, we proposed a new approach to the analysis of Mandarin indirect passives transformed from DOCs and resultatives.

2. Applicatives Were not Applicable: Theoretical and Empirical Issues

One of the critical theoretical inadequacies lined in Pykkänen's low applicative semantics, for the low applicative semantics would end up with invalid predictions by assuming that the applied argument was related directly to the theme argument by means of to-the-possession-of (x, y) [4, 5].

As far as the semantic entailment was concerned, the conjunction structure of the sentence *John wrote that letter and Bill gave Mary that letter* ($\exists e$ [writing (e) & Agent (e, John) & Theme (e, that_letter)] & $\exists e'$ [giving (e') & Agent (e', Bill) & Theme (e', that_letter) & to-the-possession-of (that_letter, Mary)]) did not entail the double object construction *John wrote Mary that letter* ($\exists e$ [writing (e) & Agent (e, John) & Theme (e, that_letter) & to-the-possession-of (that_letter, Mary)]), and vice versa, although the 'letter' in the two sentences referred to the same entity. In the conjunction structure, 'Mary' was not the potential recipient of the event 'John's writing letter'; while in the double object construction, it was. Unfortunately, Pykkänen's low applicative semantics failed to present this semantic distinction.

In addition to the theoretical inadequacy discussed above, the existence of the semantic possessive relation *per se*, implied between the applied argument and the theme argument, was falsified as well. For instance, the possessive relation between the applied argument and the theme argument would instantly disappear if the latter argument was substituted by a relational noun, such as 'stepfather' as

in the sentence *John got Mary a pencil/stepfather*. The interpretation of this sentence would correspond to “John got a stepfather and that stepfather is intended to be Mary’s”. However, it was inadequate since there entailed a possibility that the stepfather was John’s, instead of Mary’s [6].

Similar counterexamples were also found in Mandarin dative DOCs, in which possessive relations were difficult to establish even with a theme argument of non-relational DP. As shown in (1), neither the theme *yige pengyou* ‘a friend’ nor *yishou ge* ‘one song’ was possessed by (or belongs to) the corresponding applied themes. Given that the transfer-to-possession relation was not a required semantic element in Mandarin dative DOCs, we concluded that Pylkkänen’s proposal of low applicatives is problematic.

- (1) a. *Lee jieshao(gei) le John yige pengyou.*
 ‘Lee introduced a friend to John. (John did not like the friend of Lee’s.)’
 b. *Lee jiao(gei) le haizimen yishou ge.*
 ‘Lee taught one song to the children. (But the children did not get it)’

Besides, according to Pylkkänen (2008), the head of low applicative (APPL) seeks to combine with a transitive verb, or any predicate of events with one unsaturated argument of type e. Therefore, the APPL never selected stative predicates, including resultatives. As illustrated in (2), unlike small clause constructions, the direct objects in English DOCs of low applicatives could not be predicated by resultatives.

- (2) a. He painted me this flower. (Low applicative)
 b. He painted this flower blue. (Resultative)
 c. *He painted me this flower blue. (a) + (b)

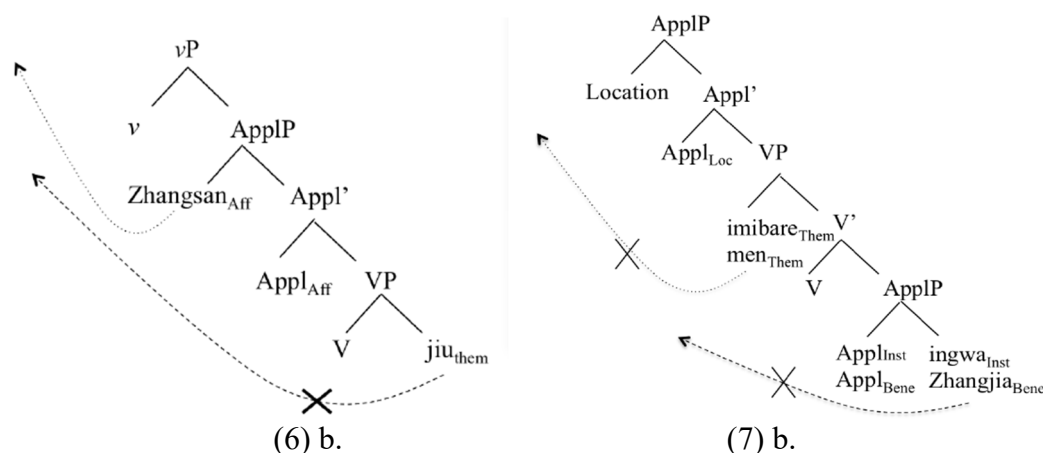
If Pylkkänen’s assumption was correct, we could expect that Mandarin malefactive, benefactive, and source DOCs might fail to combine with resultatives, since they fulfilled the requirements as being the low (or non-high) applicatives. However, this assumption was counterfactual.

- (3) *gongren xiu-hao le Zhangjia sanshan men.* (Benefactive DOC)
 ‘The workers fixed three doors for Zhang Family.’
 (4) *keren he-guang le Zhangsan sanping jiu.* (malefactive DOC)
 ‘The guests drank three bottles of wine on Zhangsan.’
 (5) *xiaotou tou-zou le Zhangsan yige qianbao.* (Source DOC)
 ‘The thief stole a purse from Zhangsan.’

The benefactive DOC in (3), the malefactive DOC in (4) and the source DOC in (5) uniformly allowed the resultatives *hao* ‘well’, *guang* ‘up’ and *zou* ‘away’ to combine with their predicates, respectively, while predicating of the direct objects, i.e., [[Zhangjia [APPL chuanguhu]] hao], [[Zhangsan [APPL sanping jiu]] guang], and [[Zhangsan [APPL qianbao]] zou].

Actually, applicative theory was frequently seen in the discussion of (pseudo) DOCs and other non-canonical constructions in Mandarin. Tsai (2012) argued that both Mandarin benefactive and malefactive DOCs (as in (6) and (7)) involved applicative projections; however, they differed in the structural height of applicatives.

- (6) a. *gongren xiu le Zhangjia sanshan men.* (Benefactive DOC)
 ‘The workers fixed three doors for Zhang Family.’
 (7) a. *keren he le Zhangsan sanping jiu.* (malefactive DOC)
 ‘The guests drank three bottles of wine on Zhangsan.’



This analysis has some empirical problems. First, the benefactive NP is not forbidden to extract out, especially when the detransitive predicate is compounded, such as *xiuhao* ‘fix-well’. Second, the word order derived from the assumed applicative structure (as in (7b)) is incompatible with the real benefactive structure, since the former one has the theme NP directly followed the verb; whereas the latter one requires the benefactive NP to appear right behind the verb (as in (6a)).

Some studies argued that Mandarin *gei* ‘give’ in the *give*-type DOCs was the applicative head appearing above VP. Applicatives should always appear above the VP. They renamed the low applicative and high applicative as thematic applicative and raising applicative, respectively. It was argued that Mandarin *gei*-type DOCs present a proper instantiation for the raising applicative, where, *gei* ‘give’ is taken as the head of applicative, illustrated as in *wo mai le Mali yige shoubiao* (I sold Mali a watch), [TP WO [T' T [AspP mai-gei-le [AppIP Mali [Appl' tmai-gei [VP tmali [V' tmai [DP yige shoubiao]]]]]]]] [7, 8].

(8) [APPLP DP1 [APPL' Appl [VP V DP2]]] (Thematic Applicative)

(9) [APPLP DP1 [APPL' Appl [VP t1 [V' V DP2]]]] (Raising Applicative)

Paul and Whitman’s analysis was very appealing at first glance. They unified the high and low applicative structures; in addition, their analysis captured the raising property of the indirect object. However, their analysis was not without any problems.

To begin with, for the *give*-type DOC, they argued that only the direct object could be passivized. The reason as they provide was that the indirect object was licensed by the Appl and the direct object by *v*. When the indirect object reaches the [Spec, Appl], both its Case feature and the EPP feature were checked off by the applicative head through agreement. The unavailability of the EPP feature prevented the indirect object from being attracted to the edge of vP. However, if we accepted that the Appl head was exempted from being affected by passivization, it would be difficult to explain why in high applicatives (or thematic applicatives), the indirect object could be the passive subject, since there was no particular motivation, provided in high applicatives but lacking in low applicatives.

3. Proposals

Previously, we discussed the theoretical and empirical issues in applicative assumptions and pointed out that squeezing Mandarin (pseudo) DOCs into the applicative shoe would cause many problems. Although we abandoned the applicative theory, we insisted on pursuing a “Bi-verbal” solution for the derivation of Mandarin DOCs (and its passive alternations) and resultative indirect passives. It was well acknowledged that all the DOCs in Mandarin had Bi-verbal predicate forms, such as *song-gei* ‘give-to’ in dative type and *guan-jin* ‘shut-enter’ in directional type. As far as the DOC indirect passives were concerned, we argued that they were derived from the basic structure [V-NP1-X-NP2], in which the two objects NP1 and NP2 were taken by two verbs independently. For the

secondary predicate X, it might refer to the verb, the preposition, or any grammaticalized category, which was able to assign the (structural or inherent) case.

The case of resultative indirect passives was more complicated. Besides the type with typical Bi-verbal resultatives, none of the other indirect passives seemed predicated with the overt compound form. However, it was instructive to note that the so-called monoverbal constructions had the same syntactic performance with the type of DOCs, as their predicates could be compounded through attaching resultative predicates. The compounding requirement seemed even more prominent in their passive variations, such as *Zhangjia bei gongren xiu*(hao) le sanshan men* (Zhang family got three doors fixed by the workers). Following this lead, we assumed that the monoverbal resultative indirect passives contained implicit secondary predicates as well. Their predicates were syntactically constituted by two verbs, each of which took one object. In most of the cases, these two objects were referred to the same entity with the same form and one of them would be optionally muted, as in [Cause... [NP1 [V1 [V2_{Beome-Adj} NP1]]]].

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