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A study note on the state-denoting 個 *ge* "GE" construction

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Abstract

This short paper investigates a colloquial construction in Mandarin Chinese in which a secondary predicate may be preceded by the enclitic *ta* (它 *ta* "it") and the classifier 個 *ge* "GE." The paper argues that *ge* heads a dependent clause, where the enclitic is the subject of the secondary predicate. Therefore, first, the classifier is not used as a counting unit in this numeral classifier language; and second, in addition to PRO, another form of the subject for a dependent clause is attested in secondary predicate construction in this language.

Keywords: Classifier; Secondary predicate; Nominalization; Subject; Proform

1 Introduction: the state-denoting *GE* construction

In this paper, I discuss the syntax of a special secondary predicate construction in colloquial Mandarin Chinese. The research goal is to report a special use of a classifier and a special use of a pronominal element. Two examples of the construction are in 1. The state-denoting adjective 痛快 *tongkuai* "overjoyed" is preceded by the cluster (一)個 (*yi)-ge* "one GE" in both examples. In addition, the pronominal enclitic *ta* (TAc) also precedes the cluster in 1a. The enclitic shares its form with the third person singular pronoun 她/他/它 *ta* "she/he/it." The optional 一 *yi* shares its form with the numeral 一 *yi* "one," and 個 *ge* is a classifier. I will call the construction state-denoting GE-construction (SGC henceforth). In this construction, the post-verbal string is not an argument of the verb. In 1, the verb 玩 *wan* "play" is unergative, taking the nominal 我們 *women* "we" as its unique argument[a].

(1)   a. 我們玩它(一)個痛快.

women__wan__ta__(yi)-ge__tongkuai.

1PL__play__TA__one-CL__overjoyed

Let's play until we are overjoyed.

   b. 我們玩了(一)個痛快.

women__wan-le__(yi)-ge__tongkuai.

1PL__play-PRF__one-CL__overjoyed

We played until we were overjoyed

This construction can be compared with the following constructions, which also have TAc and a special use of the classifier *ge*.

(2)   a.   我想畫它(個)三幅漫畫.

wo__xiang__hua__ta__(ge)__san__fu__manhua.

1SG__want__draw__TA__CL__three__CL__cartoon

I want to draw three cartoons.

b.   我想吃它四個肉包子.

wo__xiang__chi__ta__si__ge__rou-baozi.

1SG__want__eat__TA__four__CL__meat-steamed.dumpling

I want to eat four meat steamed dumplings.

SGCs and examples such as those in 2 share some properties. For instance, different from the personal pronoun use of 她/他/它 *ta* "he/she/it," *ta* in these constructions must have a morphological host to its left, and thus, it is an enclitic (Lin and Zhang 2006: 817-818). Since TAc never initiates a clause, sentences like 3 are not acceptable. Also, like other clitics (see Klavans 1985), TAc has a categorially specified host: it takes a verb as its host (Lin and Zhang 2006: 819). Thus, it may not follow a preposition. For instance, TAc may not follow the preposition 到 *dao* "until" in the SGC in 4a, and the preposition 向 *xiang* "toward" in the non-SGC in 4b. TAc also may not follow a conjunction, such as 和 *he* "and," as seen in the SGC in 5a and the non-SGC in 5b.

(3)   *它一個措手不及, 我想殺.

*ta__yi-ge__cuoshoubuji,__wo__xiang__sha.

TA__one-CL__unprepared__1SG__want__kill

(4)   a.   *吃到它個飽.

*chi__dao__ta__ge__bao.

eat__until__TA__CL__full

b.   *我要向它一個人發洩一下.

*wo__yao__xiang__ta__yi__ge__ren__faxie__yixia.

1SG__want__toward__TA__one__CL__person__vent__once

(5)   a.   *我想殺它一個措手不及和它一個片甲不留.

*wo__xiang__sha__ta__yi-ge__cuoshoubuji__he__ta __yi-ge__pianjia-buliu.

1SG__want__kill__TA__one-CL__unprepared__and__TA__one-CL__nothingremain

b.   *我想看它三本漫畫和它四本雜誌.

*wo__xiang__kan__ta__san__ben__manhua__he__ta__si__ben__zazhi.

1SG__want__read__TA__three__CL__cartoon__and ta__four__CL __magazine

Moreover, like other clitics, TAc is phonologically weak. It has a neutral tone (Ma 马 庆株 1983: sec. 12) and is thus never stressed, as shown by the unacceptability of 6a and 7a; and it never contrasts to another element in the context, as shown by the unacceptability of 6b and 7b.

(6)   a.   *玩它(一)個痛快.

            *wan__ta__(yi)-ge__tongkuai (if *ta* is stressed)

            play__TA__one-CL__overjoyed

    b.   *我們玩它一個痛快,不是玩一個痛快.

            *wan__ta__yi-ge__tongkuai, __bu-shi__wan__yi-ge__tongkuai.

            play__TA__one-CL__overjoyed__not-be__play__one-CL__overjoyed

(7)   a.   *我想畫它三幅漫畫.

            *wo__xiang__hua__ta__san__fu__manhua. (if *ta* is stressed)

            1SG__want__draw__TA__three__CL__cartoon

    b.   *我想畫它三幅漫畫,不是三幅漫畫.

            *wo__xiang__hua__ta__san__fu__manhua, __bu-shi__hua__san__fu__manhua.

            1SG__want__draw__TA__three__CL__cartoon__not-be__draw__three__CL__cartoon

Wu and Mathews (2010: 1809) deny the clitic status of TAc, trying to give a unified analysis of TAc and all other uses of *ta*. Properties like these challenge their analysis and support the clitic analysis of TAc in 1 and 2[b].

However, SGCs are different from the constructions in 2. The right-edge expression denotes a state in the former, but an entity in the latter. Restricting my discussion to SGCs, I do not consider the latter constructions in this paper.

In an SGC, to the right of the verb, except *yi* "one," no real numeral may occur (e.g., Wu 2004: 33), as shown in 8. In contrast, 三 *san* "three" occurs in 2a and 四 *si* "four" occurs in 2b. Also, only the classifier *ge* may occur in a SGC, as shown in 9. In contrast, the classifier 幅 *fu* occurs in 2a.

(8)   *咱們完它三個痛快.

        *zanmen__wan__ta__san__ge__tongkuai.

        1PL__play__TA__three__CL__overjoyed

(9)   *咱們玩它一{幅/次}痛快.

        *zanmen__wan__ta__yi__{fu/ci}__tongkuai.

        1PL__play__TA__one __CL/CL__overjoyed

Thus, in a SGC, *yi* does not function as a numeral, nor does *ge* as a counting unit.

I will introduce the secondary predicate status of the right-edge expression of a SGC in Section 2. Then, I will examine the two functional elements of the construction, *(yi)-ge* and TAc, in the next two sections, respectively. Section 5 concludes the paper.

2 Secondary predication in SGCs

In a SGC, the phrase that follows *(yi)-ge* is a secondary predicate. For instance, 新鮮 *xinxian* "fresh" in 10a describes the state of the patient of the verb 吃 *chi* "eat," and therefore, it is a patient-oriented secondary predicate. The right-edge expressions in other examples in 10 are also patient-oriented secondary

predicates. Moreover, the expression 昏天黑地 *hun-tian-he-di* "dusk-sky-dark-earth" in 11a describes the resultant drunk state of the agent of the verb 喝 *he* "drink," and therefore, it is an agent-oriented secondary predicate. The right-edge expressions in other examples in 11 are also agent-oriented secondary predicates. Furthermore, the expression 風捲殘雲 *feng-juan-can-yun* "wind-wrap-remaining-cloud" in 12a describes the manner of the verb 吃 *chi* "eat," and thus, it is an event-oriented secondary predicate, assuming manners are predicates (Ernst 2002: 322; den Dikken 2006: 30). The right-edge expressions in other examples in 12 are also event-oriented secondary predicates (for more such examples, see Wu 2004: 21)[c].

(10)　　a.　吃它一個{新鮮/爽口}.
　　　　　　chi__ta__yi-ge__{xinxian/shuangkou}.
　　　　　　eat__TA__one-CL__fresh/delicious
　　　　　　Let's eat the food {fresh/delicious}.

　　　　b.　我們可以打它一個措手不及.
　　　　　　women__keyi__da__ta__yi-ge__cuoshoubuji.
　　　　　　1PL__can__beat__TA__one-CL__unprepared
　　　　　　We can give them an unexpected hit.

　　　　c.　打它一個片甲不留.
　　　　　　da__ta__yi-ge__pianjia-buliu.
　　　　　　beat__TA__one-CL__nothing-remain
　　　　　　Let's beat them and make them have nothing left.

(11)　　a.　我們去喝它一個昏天黑地.
　　　　　　women__qu__he__ta__yi-ge __hun-tian-hei-di.
　　　　　　1PL__go__drink__TA__one-CL__dusk-sky-dark-earth
　　　　　　Let's go to drink until we get drunk.

　　　　b.　阿林想吃它一個過癮.
　　　　　　a-lin__xiang__chi__ta__yi-ge__guoyin.
　　　　　　A-Lin__want__eat__TA__one-CL__enjoyed
　　　　　　A-Lin wants to eat until he is enjoyed.

　　　　c.　咱們看它一個飽.
　　　　　　zanmen__kan__ta__yi-ge__bao.
　　　　　　1PL__watch__TA__one-CL__full
　　　　　　Let's watch (e.g., movies) until we get satisfied.

(12)　　a.　吃了一個風捲殘雲.
　　　　　　chi-le__yi-ge__feng-juan-can-yun.
　　　　　　eat-PRF__one-CL__wind-wrap-remaining-cloud
　　　　　　{They/He/She/You} ate to a clean sweep.

　　　　b.　咱們去問它一個水落石出.
　　　　　　zanmen__qu__wen__ta__yi-ge__shui-luo-shi-chu.
　　　　　　1PL__go__ask__TA__one-CL__water-fall-rock-out
　　　　　　Let's do a thorough interrogation until everything is clear.

c. 吃它一個夠.
chi__ta__yi-ge__gou.
eat__TA__one-CL__enough
Eat until it should stop.

In a SGC, the category of the right-edge phrase can be a simple AP, e.g., 新鮮 *xinxian* "fresh" in 10a, or an idiomatic expression, e.g., 片甲不留 *pianjia-buliu* "nothing remain" in 10c. Such an AP and idiomatic expression can also occur in a matrix predicate, as in 13 (the idiomatic expression is not gradable, and therefore, it does not occur with a degree word):
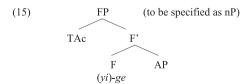
(13)   a.   食物很新鮮.
shiwu__hen__xinxian.
food__very__fresh
The food is fresh.

b.   敵人已經片甲不留了.
diren__yijing__pianjia-buliu__le.
enemy__already__nothing-remain__PRT
The enemy has already nothing left.

3 *GE* as the head of a dependent clause

Recall that the classifier *ge* in a SGC does not express a counting unit (Section 1). In this section, I argue that *ge* in a SGC realizes the head of a dependent clause, which is similar to a non-finite or nominalized clause in other languages. This word is obligatory in the construction (Wu 2004: 48 fn. 15; Lin and Zhang 2006: 803):

(14)   咱們玩它(一)*(個)痛快.
zanmen__wan__ta__(yi)-*(ge)__tongkuai.
1PL__play__TA__one-CL__overjoyed
Let's play until we are overjoyed.

The element *yi* to the left of *ge* is optional in a SGC (Lü 吕叔湘1944 [1990]). It may not be replaced with any real numeral (Section 1), or any other word. Lü 吕叔湘 (1944 [1990: 174]) claims that in many contexts, *ge* is a short form of *yi-ge* (also see Wu 2004: 48 fn. 19; Shu 2012: 672). I thus claim that *yi-ge* and *ge* are allomorphs of the same morpheme in a SGC.

I claim that *(yi)-ge* heads a functional projection. The structure of the post-verbal string in a SGC is 15, where *(yi)-ge* realizes the head of FP.

(15)

```
            FP          (to be specified as nP)
          /    \
       TAc      F'
              /    \
            F        AP
          (yi)-ge
```

Like other head elements, *(yi)-ge* has selectional restrictions: the element to its right must be gradable, unless it is a four-morpheme idiomatic expression, such as 片甲不留 *pianjia-buliu* "nothing remain" in 10c. For instance, 痛快 *tongkuai*

"overjoyed" in 14 is gradable and so is 開心 *kaixin* "happy" in 16 (regardless of whether the expressions are analyzed as adjectives or stative verbs). When the statives are used in a matrix predicate, they may occur with a degree word such as 很 *hen* "very" (*hen tongkuai*, *hen kaixin*).

(16)   玩個開心.
         wan__ge__kaixin.
         play__CL__happy
         to play until feeling happy

The restriction, first, rules out a non-gradable stative expression, such as 累翻 *lei-fan* "tired-tumble," 餓昏 *e-hun* "hungry-faint," or 氣炸 *qi-zha* "angry-explode," to the right of *(yi)-ge*, as seen in 17. In no context may such words be preceded by a degree word (*hen lei-fan, *hen e-hun, *hen qi-zha)[d].

(17)   a.   *他跑了個累翻.
               *ta__pao-le__ge__lei-fan.
               3SG__run-PRF__CL__tired-tumble

         b.   *他聽了個氣炸.
               *ta__ting-le__ge__qi-zha.
               3SG__listen-PRF__CL__angry-explode

Second, the restriction also excludes a PP to the right of *(yi)-ge*, since a PP is not gradable. In 18a, the PP 自國外 *zi guowai* "from abroad" follows *(yi)-ge*, and the example is not acceptable. Similarly, in 18b, the PP 到天亮 *dao tian liang* "until day bright" follows *(yi)-ge*, and the example is not acceptable, either.

(18)   a.   *來它(一)個自國外.
               *lai__ta__(yi)-ge__zi __guowai.
               come__TA__one-CL__from__abroad

         b.   *玩它(一)個到天亮.
               *wan__ta__(yi)-ge__dao__tian__liang.
               play__TA__one-CL__until__day__bright

Now, we discuss the nature of this F in 15. First of all, the special use of *(yi)-ge* is not found in matrix predication (*蔬菜(一)個(很)新鮮**shucai (yi)-ge (hen) xinxian.* Intended: "The vegetable is fresh"; also see Zhang 张庆文2009: (26b)). The string *ta-(yi)-ge-AP* always expresses a secondary predication. Thus, *(yi)-ge* heads a dependent clause, like *to* in infinitives or *of* in a nominalization construction such as *the destruction of Rome*.

Moreover, *ge* in an SGC indeed behaves like a nominalizer. If an element is used as a nominalizer, it does not license ellipsis, although it may do so in another use. In 19a, in its modification marker use, 的 *de* "DE" licenses the ellipsis of 方言 *fangyan* "dialect" in the second conjunct; but in 19b, in its nominalizer use, *de* does not license the ellipsis

of 淪陷 *lunxian* "fall" in the second conjunct. Likewise, in 20a, in its counting unit use, *ge* licenses the ellipsis of 叉子 *chazi* "fork" in the second conjunct; but in the SGC in 20b, *ge* fails to license the ellipsis of 夠 *gou* "enough" in the second conjunct. This fact supports the nominalizer analysis of *ge* in a SGC.

(19) a. 他研究東北的方言, 我研究北京的.
          ta__yanjiu__dong-bei__de__fangyan,__wo__yanjiu__beijing__de.
          3SG__study__east-north__DE__dialect__1SG__study__Beijing__DE
          He studies the Northeast dialects, and I study the Beijing dialect.

      b. *他研究東北的淪陷, 我研究北平的.
          *ta__yanjiu__dong-bei__de__lunxian,__wo__yanjiu__beiping__de.
          3SG__study__east-north__DE__fall__1SG__study__Peking__DE

(20) a. 他買了一個叉子,我也買了一個.
          ta__mai-le__yi__ge__chazi,__wo__ye__mai-le__yi__ge.
          3SG__buy-PRF__one__CL__fork__1SG__alsobuy-PRF__one__CL
          He bought a fork, and so did I.

      b. *他要玩一個夠,我也要玩一個.
          *ta__yao__wan__yi-ge__gou,__wo__ye__yao__wan__yi-ge.
          3SG__want__play__one-CL__enough__1SG__also__want__play__one-CL

In the language, a secondary predicate may also be introduced by the functional element 得 *de* "DE," as seen in 21.

(21) a. 你吃得很痛快.
          ni__chi__de__hen__tongkuai.
          2SG__eat__DE__very__overjoyed
          You ate very overjoyed.

      b. 你吃得痛不痛快?
          Ni__chi__de__tong-bu-tongkuai?
          2SG__eat__DE__overjoyed-not-overjoyed
          Did you feel overjoyed in your eating?

The post-*de* secondary predicate is represented by a full clause, a CP (Li 1999). In contrast, the post-verbal string in a SGC is not a full clause. Instead, it behaves like a nominalized structure, since it is subject to certain constraints on nominalization in the language: the degree word *hen* "very," which heads a DegreeP (Zhang 2015), and the A-not-A question form may not occur in the nominalization domain (Fu 1994; Fu et al. 2001). For instance, *hen* is banned to the right of (*yi*)-*ge*, as seen in 22a (Wu 2004: 24; Lin and Zhang 2006: 802; Shu 2012: 685). Moreover, the predicate following (*yi*)-*ge* may not have an A-not-A form, as shown in 22b (Wu 2004: 25, 31). The ungrammaticality of the examples in 22 is compared with the grammaticality of the *de* constructions in 21. Since the post-*de* part is a CP (Li 1999), rather than a nominalized expression, it is not subject to the constraints that are found in nominalized expressions.

(22) a. *吃它(一)個很痛快.
          *chi__ta__(yi)-ge__hen__tongkuai.
          eat__TA__one-CL__very__overjoyed

      b. *吃它(一)個痛不痛快?
          *chi__ta__(yi)-ge__tong-bu-tongkuai?
          eat__TA__one-CL__overjoyed-not-overjoyed

We conclude that a SGC contains a nominalized secondary predication structure, different from the *de*-type of secondary predication syntactically (contra Shao 邵 敬敏1984 and Zhang 张庆文2009: 19)[e]. In English, in addition to a full CP that is introduced by words such as *such that*, non-finite forms, such as infinitives and nominalization constructions, also express a dependent predication. In Chinese, the default classifier *ge* (or its morphological variant *yi-ge*) may have the function of a nominalizer (see Myers 2000 for *ge*'s special status even when it occurs as a counting unit). Since classifiers in numeral classifier languages may have various uses (Bisang 1999), this use of *ge* is not surprising.

Therefore, FP in 15 can be specified as nP. The structure is compatible with Bresnan (1997), and Borsley and Kornfilt's (2000) claim that nominalization of XP is represented by the merger of XP with a nominal functional head, such as n. Also, the word *of* in an *of*-nominalization expression (e.g., *the development of the country*) is obligatory; and similarly, *(yi)ge* in a SGC is obligatory. On the other hand, in examples like 2a, where the right-edge phrase is already a nominal, *ge* is not obligatory.

Having established that *(yi)-ge* heads an nP and takes the secondary predicate as its complement in a SGC, I now turn to my analysis of TAc in the construction.

4 TAc as an overt subject of a dependent clause in a SGC

Various analyses of TAc have been proposed in the literature. But these analyses are proposed for constructions such as those in 2, where the post-verbal string initiated by TAc looks like an object of the preceding verb. For instance, Lin (1994) and Wu and Matthews (2010) claim that TAc is an object expletive (AgrOP expletive in Lin's term), and Lin and Zhang 2006 claim that it is a D-element. The SGCs discussed in this paper are semantically and syntactically different from the constructions such as those in 2 (see Section 1). Crucially, the verb of a SGC can be unergative, such as 玩 *wan* "play." There is no argument position for the assumed DP. Therefore, in a SGC, neither the whole post-verbal string nor any part of it is an object of the verb, and thus, neither definiteness features nor any other formal features of an object occur in the post-verbal elements. Consequently, these analyses do not apply to SGCs. In this section, I discuss the syntactic position and syntactic function of TAc in a SGC, showing that it is the subject of the secondary predicate.

4.1 The syntactic position of TAc

I have argued that in a SGC, the right-edge phrase is a secondary predicate, which is hosted by an nP that is headed by *(yi)-ge*. I now further claim that TAc

is in the subject position of this predication, occurring at the Spec of nP. In this perspective, the nP is one instance of the general predication-denoting projection, such as Bowers's (1993) PredP or den Dikken's (2006) RP. In such a projection, the Spec is the position of a subject and the complement is the position of a predicate.

In 15, TAc and (*yi*)-*ge* have a Spec-head relation. If two elements are in a Spec-head relation, no element may intervene. Indeed, no element, such as the determinative degree word *name* "that degree," may occur between TAc and (*yi*)-*ge* in a SGC, as shown in 23.

(23)   *吃它那麼一個痛快.
        *chi__ta__name__yi-ge__tongkuai.
        eat__TA__that.degree __one-CL__overjoyed

This adjacency relation also rules out a topic analysis of TAc. In the embedded sentence of 24a, the embedded subject, the pronoun 他 *ta* "he," is followed by the topic marker 呀 *ya*. In the SGC in 24b, however, TAc may not be followed by *ya*.

(24)   a.   我聽說他呀根本是一個書呆子.
              wo__tingshuo__ta__ya__genben__shi__yi__ge__shudaizi.
              1SG__hear__3SG__TOP__just__be__one__CL__bookworm
              I heard that he is just a bookworm.

        b.   吃它(*呀)一個痛快.
              chi__ta__(*ya)__yi-ge__tongkuai.
              eat__TA__TOP__one-CL__overjoyed
              Eat until you are overjoyed.

In the examples in 25, the bracketed part is nominalized by the element *de*. One can see that this part may not contain a topic. This is expected, since a nomina-lized expression has no C-domain functional projection to host a topic (similarly, **I disapprove of such books your reading*. See Hooper and Thompson 1973: 485). Thus, it is not surprising that the whole string *TAc-yi-ge-*XP, as a nominal, may not contain a topic.

(25)   a.   我了解[李安對藝術的貢獻].
              wo__liaojie__[li-an__dui__yishu__de__gongxian].
              1SG__know__ Lee Ang__to__art__DE__contribution
              I know Lee Ang's contribution to art.

        b.   *我了解[(對)藝術李安的貢獻].
              *wo__liaojie__[(dui)__yishu,__ li-an__de__gongxian].
              1SG__know__to__art__Lee Ang__DE__contribution

        c.   *我了解[藝術呀李安的貢獻].
              *wo__liaojie__[yishu ya,__ li-an__de__gongxian].
              1SG__know__art__TOP__Lee Ang__DE__contribution

Moreover, every predicate has its subject, so does the secondary predicate of a SGC. Thus, TAc can be in a thematic position, unlike an expletive, which may surface in a non-thematic position in Icelandic or English (e.g., *it* in *It seems that you like this paper*).

Furthermore, like a subject in other constructions in the language, TAc is generally optional (Ma 马庆株1983: sec. 12). However, the overtness of the subject of the secondary predicate in SGCs is subject to certain conditions. For instance, if a verb has an aspect marker, TAc does not show up in a SGC, as shown in 26 (Lin and Zhang 2006: 819) (many more examples like 26 can be found in Lü 吕叔湘1944 [1990: 153])[f].

(26)   我們玩了(*它)(一)個痛快.
         women__wan-le__(*ta)__(yi)-ge__tongkuai.   (cf. 1a)
         1PL__play-PRF__TA__one-CL__overjoyed

Also, if the verb is stative, TAc does not show up, as seen in the SGC in 27 (27 is from reviewer 2; more such examples can be found in Zhang 张庆文 2009: 14) and the non-SGCs in 28 (Lin 2001, cited in Shu 2012: 669).

(27)   張三想死(*它)個痛快.
         zhangsan__xiang__si__(*ta)__ge__tongkuai.
         Zhangsan__want__die__TA__CL__simple
         Zhangsan wants to die, away from the problems.

(28)   a.   [懂(*它)個法文]有甚麼了不起.
                [dong__(*ta)__ge__fawen]__you__shenme__liaobuqi.
                understand__TA__GE__French__have__what__big.deal
                Is it a big deal to understand French?

         b.   [老(*它)個幾歲]不是很重要.
                [lao__(*ta)__ge__ji-sui]__bu__shi__hen__zhongyao.
                old__TA__CL__several-year__not__be__very__important
                Is it a big deal to understand French?

On the other hand, as pointed out by reviewer 2, dropping of *ta* (i.e., TAc) makes some examples such as 10c sound marginal. We also find the same effect in 10b, 11b, 12a, and 12b. I leave this for future research.

4.2 The dependent interpretation of TAc
Semantically, TAc, as a pronominal subject of a dependent clause, has no independent referent (cf. Ma 马庆株1983: sec. 12). In 29a, the resultant state is that of A-Lin, which is an argument of the matrix predication, rather than anyone else in the discourse context. If the secondary predicate is about an event, as in 12a, it does not refer to any event other than the one that is expressed by the matrix predicate. Therefore, the interpretation of TAc is not free.

(29)   a.   阿林想吃它一個飽.
                a-lin__xiang__chi__ta__yi-ge__bao.
                A-Lin__want__eat__TA__one-CL__full
                A-Lin wants to eat until he gets full.

b.　我們想吃它一個飽.
　　　women__xiang__chi__ta__yi-ge__bao.
　　　1PL__want__eat__TA__one-CL__full
　　　We want to eat until we get full.

Moreover, TAc occurs with a secondary predicate that is associated with any person and number, indicating that it is not specified with any φ-feature value. In 29a, the state 一個飽 *yi-ge bao* "one CL full" is associated with 阿林 "a-lin" *A-Lin*, a third person singular nominal; but in 29b, the same state is associated with the first person plural 我們 *women* "we." The form of TAc remains the same in these different person and number associations (Chinese nominals, including personal pronouns, have no morphological gender contrast).

Furthermore, TAc may not be replaced with another pronoun such as 你 *ni* "you" or 我 *wo* "I/me" (Ma 马庆株 1983: sec. 12), or any other element, including 自己 *ziji* "self," which is also underspecified with φ-feature values, as shown in 30a, or an expression such as 他們兩個人 *tamen liang ge ren* "they two," as shown in 30b:

(30)　　a.　玩{它/*自己}一個痛快.
　　　　　　wan__{ta/*ziji }__yi-ge__tongkuai!
　　　　　　play__TA/self__one-CL__overjoyed
　　　　　　Play until we are overjoyed.

　　　　b.　阿林跟莉莉玩了{它/*他們兩個人}一個痛快.
　　　　　　a-lin__gen__lili__wan-le__{ta/*tamen__liang__ge__ren}__yi-ge__tongkuai.
　　　　　　A-Lin__and__Lili__play-PRF__TA/3PL__two__CL__person__one__CL__
　　　　　　overjoyed
　　　　　　A-Lin and Lili played until they were overjoyed.

We have argued that TAc occurs in the subject position of a dependent predication. The above facts show that the interpretation of the enclitic is dependent on the matrix clause, similar to that of a PRO. It is well-recognized that PRO occurs in the subject position of a dependent clause only. Moreover, for a non-arbitrary PRO, it takes either an individual-denoting nominal of the matrix clause, or an event-denoting matrix clause, as its antecedent. When it takes an individual-denoting nominal as its antecedent, the antecedent may have any φ-features. In Hornstein and Lightfoot (1987), Larson (1991), and Bowers (1993), the silent subject of a resultative or depictive is analyzed as a PRO, and its antecedent is an argument of the matrix predication. For instance, the subject of *clean* in 31a is a PRO, whose antecedent is *the table*, the object of *wiped*. Similarly, the subject of *raw* in 31b is a PRO, whose antecedent is *the fish*, the object of *ate*. Williams (1974; 1985: 308) also shows that "the matrix S itself is available as a controller of the result clause." One of his examples is 31c. In this case, the antecedent of the PRO is the whole event-denoting matrix clause.

(31)　　a. John wiped the tablei [PROi clean].
　　　　b. John ate the fishi [PROi raw].
　　　　c. [John went to New York]i [PROi to annoy Mary].

Thus, it is plausible that TAc, as a pronominal subject of a secondary predicate, takes an implicit or explicit argument of the matrix clause, or the event expressed by the matrix clause, as its antecedent. Therefore, the interpretation of TAc depends on the matrix clause. For instance, the antecedent of TAc in 30a is the agent of the matrix verb *wan* "play," which is a *pro*.

In this analysis, TAc looks like an overt PRO. Cross-linguistically, the position of PRO may indeed be filled by an overt form, such as a special form of a pronoun or a reflexive. See Borer (1989), Szabolcsi (2009), Lee (2009), and Landau (2015: 80) for examples and discussion.

The subject position and dependent reading also distinguish TAc from the use of 你 *ni* "you" in examples like 32.

(32)   a.   殺你個片甲不留.
            sha__ni__ge__pianjia-buliu.
            kill__2SG__CL__noting-remain
            A: *{We/I} will attack you such that you have nothing left.*
            B: *Someone will attack others such that the latter has nothing left.*

       b.   他要殺你個片甲不留,而不是殺我個片甲不留.
            ta__yao__sha__ni__(ge__pianjia-buliu),__er-bushi __sha__wo__ge__
            3SG__want__kill__2SG__CL__noting-remain _but-not__kill__1SG__CL__
            pianjia-buliu.
            noting-remain
            He wants to attach you, but not me, such that you have nothing left.

Two facts indicate that 你 *ni* "you" in 32 is the object of the verb 殺 *sha* "kill," rather than the subject of the secondary predicate. First, as shown in 7 above, TAc does not contrast with any element in the context, showing that it is a pronominal subject of the dependent clause. However, 你 *ni* "you" contrasts with 我 *wo* "I" in 32b. Second, if the verb in a SGC has no object, 你 *ni* "you" may not occur. In 33, the closest verb to the secondary predicate is the unergative verb 玩 *wan* "play." We can see that *ni* may not occur there (also see 30). If the occurrence of 你 *ni* "you" requires the verb to be transitive, the hypothesis that it is the object of the verb is supported.

(33)   我想讓你玩(*你)個痛快.
       wo__xiang__rang__ni__wan __(*ni) __ge__tongkuai.
       1SG__want__let__2SG _play__2SG__CL__overjoyed
       I want to let you play until you are overjoyed.

We thus claim that 你 *ni* "you" in 32 is the internal argument of 殺 *sha* "kill." In 32b, it refers to the addressee exclusively, but in 32a, it may also have a generic use (i.e., Reading B; see Chao 1968: 648). As for the subject of 片甲不留 *pianjia-buliu*, it is null. TAc may not occur there because its cliticization on the verb is blocked by the object 你 *ni* "you."

5 Summary

Summarizing, in this paper, I have argued that in a SGC, the right-edge phrase is a secondary predicate, and its possible overt subject is TAc. The dependent predication is represented by a nominal functional projection, headed by *(yi)-ge*. For this type of dependent predication, TAc is the only possible overt form of the subject. As an enclitic that takes a verb as its morphological host, TAc never initiates a clause, and it does not follow any element other than a verb.

Having argued for the syntactic status of each component of the post-verbal string of a SGC, i.e., the nP in 15, I now briefly address the issue how the nP is integrated into the structure of the whole sentence. The way of the integration depends on the semantic type of the secondary predicate expressed. It is generally assumed that a depictive is hosted by an adjunct of the matrix predicate, whereas a resultative is hosted in the complement of matrix verb (Bowers 1993, Hornstein and Lightfoot 1987, Larson 1991, among others). Under this assumption, I claim that for a non-resultative secondary predicate, the nP in 15 is adjoined to the structure of the matrix predicate. I leave the exact merging position vague here, since it is not crucial for the purpose of this paper. As for a resultative, one analysis is Ramchand (2008), in which an event structure has three major projections: InitiationP, where an agent or causer is hosted, ProcessP, where a patient is hosted, and ResultP. The last one encodes the resultative predication. The three projections are semantically parallel to Moens and Steedman's (1988) preparatory process, culmination, and consequence state, respectively. Accordingly, for instance, 34a should have the structure in 34b, before any movement operation is implemented. In this example, the patient of the verb 打 *da* "beat" is a *pro* (or an implicit internal argument), which is also the antecedent of *ta*.

(34)　　a.　打它一個片甲不留.

　　　　　　da__ta__yi-ge__pianjia-buliu.

　　　　　　beat__TA__one-CL__nothing-remain

　　　　　　Let's beat them such that they have nothing left.

　　　　b.　$[_{\text{InitiationP}}pro_k[_{\text{Initiation'}}\varnothing[_{\text{ProcessP}}\ pro_i[_{\text{Process'}}da[_{\text{ResultP(=nP)}}ta_i[_{\text{Result'}}yi\text{-}ge[_{\text{sc}}pian\,jia\text{-}buliu]]]]]]]]$

This paper shows that in addition to the counting unit use, the default classifier *ge* can also be used to head a nominal functional projection that encodes a secondary predication. We thus find a special strategy of nominalization in a numeral classifier language.

6 Endnotes

[a]Abbreviations: CL: classifier; DE: modification/nominalization marker; EXP: experiential aspect; GE: the classifier *ge* in a SGC; PRF: perfective aspect; PRT: sentence-final particle; SGC: state-denoting *ge* construction; TAc: pronominal enclitic *ta*; TOP: topic.

[b]Both SGCs and other TAc constructions may have an irrealis reading, as in 1a and 2, or realis habitual reading, as in 1b and (i), in the absence of an aspect marker ((ia) is cited from Lin and Zhang 2006: 807).

(i)　　a.　以前每天晚上我都要看它幾本雜誌.

　　　　　　yiqian__meitian-wanshang__wo__dou__yao__kan__ta__ji__ben__zazhi.

　　　　　　before__every-evening__1SG__all__would__read__TA__several__CL__magazine

　　　　　　In the past, I read several magazines every evening.

b.　　以前我們每天都去海邊玩它個痛快.

　　yiqian　women　mei-tian　dou　qu　haibian　wan　ta　ge　tongkuai.

　　before　1PL　every-day　all　go　beach　play　TA　CL　overjoyed

　　Every evening in the past, we went to the beach to play until we were overjoyed.

[c]A durative can be a matrix predicate (Teng 1975, Ernst 1987), as in (i). It can also be an event-oriented secondary predicate. In (ii), 幾分鐘 *ji fenzhong* "several minutes" can be a secondary predicate of the matrix predicate 休息 *xiuxi* "rest" (cited from Lin and Zhang 2006: 802 (9a), also their (9b) and (4b)). As in 2a, where the right-edge phrase is a nominal, *ge* is not obligatory in (ii).

(i)　　　他來美國有兩年了.

　　　　ta　lai　Meiguo　you　liang　nian　le.

　　　　3SG　come　America　have　two　year　PRT

　　　　It has been two years since he came to America.

(ii)　　咱們就在這兒休息它(個)幾分鐘吧.

　　　　zamen　jiu　zai　zher　xiuxi　ta　(ge)　ji　fenzhong　ba.

　　　　1PL　right　at　here　rest　TA　CL　several　minute　PRT

　　　　We'll just rest here for a while.

[d]I thank reviewer 1 for giving me the example in 17a and encouraging me to think about the issue.

[e]If *de* precedes *ge*, as in (i), it is a phonological variant of the perfective marker *le* (cf. Zhang 张庆文2009: fn. 11). Since TAc in a SGC rejects *le* (4.1), it never occurs with this *de*. Also, this *de* never occurs with *yi*, as seen in (ii).

(i) 老李吃得(*它)個心滿意足.　　　　　　(ii) 老李吃{了/*得}一個心滿意足.

laoli　chi-de　(*ta)　ge　xinmanyizu.　　　laoli　chi-{le/*de}　yi-ge　xinmanyizu.

LaoLi　eat-DE　TA　CL　satisfied　　　　　LaoLi　eat-PRF/DE　one-CL　satisfied

LaoLi ate until he was satisfied.　　　　*LaoLi ate until he was satisfied.*

[f]However, in a non-SGC, TAc may follow the aspect marker –*le*:

(i)　　　阿林一口氣就買了它三件襯衫.

　　　　a-lin　yikouqi　jiu　mai-le　ta　san　jian　chenshan.

　　　　A-Lin　at.one.time　just　buy-PRF　TA　three　CL　shirt

　　　　A-Lin bought three shirts at one time.

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