Grammaticalization of the notion of "passing" in Chinese (aspectual values)

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Abstract
This article deals with the grammaticalization of the lexical meaning of GUO "to cross, pass" in Mandarin Chinese. GUO displays two aspectual/temporal values, known as the experiential suffix *-guo* and the phase complement *guo* respectively. The first indicates that in the past there is at least one instance of the event represented by the sentence and the second that an expected event has occurred and is now over. The experiential suffix refers to indefinite occurrences, whereas the phase complement refers to definite occurrences. These two values can be unified at a theoretical level. Aspectual GUO is concerned in all cases with the location of events in time: it situates an event in the (relative) past and it indicates either that among past events there is at least one occurrence of this type of event (suffix *-guo*), or that a particular (previously identified) event has passed, that is, entered the class of the past events (phase complement *guo*).

1. Introduction

In Mandarin Chinese, the semantic notion of "crossing, passing" has been exploited on the aspectual level, as the phase complement *guo* and as the experiential suffix *-guo*. The aim of this study is to unify the two aspectuo-temporal values at a theoretical level (GUO). We shall see that the aspect marker GUO indicates in all cases that an event took place: either (suffix *-guo*) that in the (relative) past there is at least one occurrence of this type of event, or (phase complement *guo*) that an expected, particular event took place, i.e. has entered the class of the past events, is over. The first reading is generic, the second is specific.

Chinese is an aspect and not a tense language. Its aspectual system, the core of which is formed by the suffixes *-le* (completion), *-guo* (experience) and *-zhe* (durative with stative meaning), attracted the attention of researchers (Teng 1973, Ma 1977, Lin 1983, Kong 1986, Huang and Davis 1989, Gong 1991, Mangione et al. 1993, Yeh 1996, Xiao and McEnery 2004, etc.). However, despite the accomplished work, the aoristic dimension of the suffix *-guo* has been widely ignored. What I show in this article is precisely that GUO is an aoristic form with unique properties.

The term "aoristic aspect" is used here in a technical sense defined by Culioli (1980: 190–91) and Desclès (1980: 220–25). The aoristic aspect is essentially characterized by temporal discontinuity between the event and the reference

point and by the manner of viewing the event as something compact, as a single indivisible whole, disregarding the phases of its development. The term "aoristic" refers to properties, not to a specific tense in a particular language. On aspect (as well as tense) in general, see Comrie 1976 and 1985, Dahl 1985, Binnick 1991, Verkuyl 1993, Smith 1997.

In Mandarin Chinese there is another aspectuo-temporal marker *guo*, which Chao (1968: 450) classifies as "phase complement", formally distinct from the suffix -*guo*. This marker signals that an expected (i.e. determined) event occurred, and is now over. It lays emphasis on the passage of the past events, irrespective of whether the action has been completed or not, whether it has reached a result or not. Again we encounter here a familiar aoristic property, already noted in the case of the suffix -*guo*: the event is apprehended globally (seen from the outside) as a whole that cannot be analysed. What remains to be clarified is the relationship between these two aspectuo-temporal values derived from the full verb *guò* "to cross, pass" ("growing abstraction", cf. Hopper and Traugott 1993), that is, the connection between the suffix -*guo* and the phase complement *guo*.

To avoid any confusion between the two aspectuo-temporal values of GUO, the suffix is written as -*guo* (GUO_1) and the phase complement as *guo* (GUO_2). The capitalized form, without a subscript, refers to either. Compare:

GUO_1

(1)   你吃过中国饭没有?
       Nǐ chī-guo Zhōngguó fàn méi yǒu?
       <you-eat-GUO_1-China-food-NEG-have>
       'Have you ever eaten Chinese food (before)?'

GUO_2

(2)   你吃过饭没有?
       Nǐ chī.guo fàn méi yǒu?
       <you-eat-GUO_2-food-NEG-have>
       'Have you had your meal? (Is it over?)'

This is a conventional greeting at meal times. The action/event 'having one's meal' is expected to occur. What is at issue here is whether it has (already) passed or not (yet). Note the difference with the suffix -*le* (*Nǐ chī-le fàn méi yǒu?*), where the emphasis is on completion, that is, the result of the action.

In what follows, I first review the suffix (its properties are contrasted with those of the suffix -*le*) and then look more closely at the phase complement. In sections 4 and 5, I pin down the grammatical meaning of GUO_1 and GUO_2, and then (section 6) proceed to unify the two values at an abstract level.

2. The suffix (GUO_1)

With the exception of modal verbs, the suffix -*guo* may follow all kinds of verbs with no restrictions, whatever the type of the event they describe (Xiao and McEnery 2004: 143). Chao (1968: 668) even quotes an example with the copula *shì* 'to be':

(3) 我从来没是过谁的人

Wǒ cónglái méi shì-guo shéi de rén.

\<I-never-NEG-be-GUO$_1$-who-DE-man>

'I have never been anybody's man.'

The verbal suffix *-guo* is taken to be an "experiential aspect" (Li and Thompson 1981: 226–32, Xiao and McEnery 2004: 144–6), or an "indefinite past" marker (Jahontov 1957: 121, Chao 1968: 251, 439). Note that the notion of "experience" is intuitive. In particular, it is inadequate for sentences lacking an animate subject:

(4) 这个地方从来没干净过。

Zhè ge dìfang cónglái méi gānjìng-guo.

\<this-CL-place-never-NEG-clean-GUO$_1$>

'This place has never been clean.'

(5) 法国和美国之间从来没发生过战争。

Fǎguó hé Měiguó zhījiān cónglái méi fāsheng-guo zhànzhēng.

\<France-and-USA-between-never-NEG-occur-GUO$_1$-war>

'There has never been a war between France and the United States.'

In order to understand the role of the suffix *-guo* within the aspectual system of Chinese, we need to compare it with the perfective suffix *-le*.

2.1. Discontinuity

One of the outstanding characteristics of *-guo* is the discontinuity it engenders between the event and the point of reference (Smith 1997: 71, 226). In this *-guo* differs from *-le* as the latter normally implies a resultative state:

(6) 她断过手臂。

Tā duàn-guo shǒubì.

\<she-break-GUO$_1$-arm>

'She broke her arm.' [It has healed since.]

(7) 她断了手臂。

Tā duàn-le shǒubì.

\<she-break-LE-arm>

'She has broken her arm.' [Unless otherwise specified, it is still in a cast.]

2.2. Narrativity

The suffix *-guo* implies a breaking up of temporal order. As a result, and unlike the suffix *-le*, it cannot mark a succession of events in time. The following pair from Li and Thompson (1981: 231) illustrates the point well:

(8) *我昨天晚上看过电视，缝过两双袜子就去睡觉。

Wǒ zuótiān wǎnshang kàn-guo diànshì, féng-guo liǎng shuāng wàzi jiù qù shuìjiào.

\<I-yesterday-evening-watch-GUO$_1$-TV-sew-GUO$_1$-two-CL/pair/-sock-then-go-sleep>

(9) 我昨天晚上看了电视，缝了两双袜子就去睡觉。

Wǒ zuótiān wǎnshang kàn-le diànshì, féng-le liǎng shuāng wàzi jiù qù

shuìjiào.
<I-yesterday-evening-watch-LE-TV-sew-LE-two-CL/pair/-sock-then-go-
sleep>
'Last night I watched TV, sewed two pairs of socks, and went to bed.'

2.3. Verbal reduplication

Between the two occurrences of a reduplicated verb of action one can
insert the suffix *-le*, whereas the insertion of the suffix *-guo* is impossible (Lü
1980: 217):

(10)   等了等Ć
       děng-le děng
       <wait-LE-wait>
       'have waited a little'

(11)   *等过等
       **děng-guo děng*
       <wait-GUO$_1$-wait>

2.4. Imperatives

Unlike *-le*, *-guo* cannot occur in imperative sentences.

(12)   擦了它!
       Cā-le tā!
       <erase-LE-it>
       'Get rid of it [e.g. what's on the blackboard]!' (Li and Thompson: 1981:
       208)

(13)   *擦过它!
       **Cā-guo tā!*
       <erase-GUO$_1$-it>

2.5. Recurrence

The only semantic constraint to which the suffix *-guo* seems to be subject is
recurrence. For example:

(14)   *她 死过。
       **Tā sǐ-guo.*
       <she-die-GUO$_1$>

Compare:

(15)   她的牙掉过。
       Tā de yá diào-guo.
       <she-DE-tooth-fall-GUO$_1$>
       'She once lost her teeth.' (Her teeth fell out.) [Now, they have grown
       again.]

(16)   她的牙掉了。
        Tā de yá diào-le.
        <she-DE-tooth-fall-LE>
        'She has lost her/his teeth.' [S/he is toothless.]

3. The phase complement (GUO$_2$)

According to Lü (1980: 216), the phase complement marks the termination of an action (*dòngzuò wánbì*). Likewise Fang (1992: 458) employs the term *wánjié* 'to end, be over, finish' to define the grammatical meaning of GUO$_2$.

Unlike the suffix *-guo*, compatible with almost any type of verb, the phase complement *guo* requires verbs denoting events susceptible to duration. These are durative verbs which, in Vendler's (1967) nomenclature, correspond to "activities" and "accomplishments".

Since GUO$_2$ is less familiar than GUO$_1$, we need to go into some detail in order to ascertain its exact nature and meaning. GUO$_2$ is not an ordinary resultative complement (cf. Chao 1968, Lü 1980, Fang 1992), nor is it a suffix. In the evolution chain it stands somewhere between resultative verb complements (RVCs) and verbal suffixes. It shares some properties with the former and others with the latter.

3.1. Stress/tone
Unlike the suffix, which is unstressed and pronounced in the neutral (light) tone, the phase complement may be stressed and may keep its lexical tone (Chao 1968: 251, Liu et al. 1983: 233, Xiao and McEnery 2004: 177, n. 63). Note that normally RVCs keep their lexical tones, whereas GUO$_2$ is often unstressed and toneless.

3.2. No potential form
GUO$_2$ cannot appear in the potential form (Lü 1980: 216). In this respect, it differs from standard RVCs occupying the position V$_2$ within resultative verb compounds V$_1$V$_2$, since the latter are generally provided with potential forms.

3.3. Negation
Lü (1980: 217) observes that, unlike GUO$_1$, GUO$_2$ is deleted in the negative form. Compare:

GUO$_1$

(17)   吃过小米。/ 没吃过小米。
        Chī-guo xiǎomǐ. / Méi chī-guo xiǎomǐ.
        <eat-GUO$_1$-millet / NEG-eat-GUO$_1$-millet>
        'Have eaten millet (before)'/'Have never eaten millet (before).'

GUO$_2$

(18)   吃过饭了。/ 还没吃呢。
        Chī.guo fàn le. / Hái méi chī ne.
        <eat-GUO$_2$-food-FP / still/yet-NEG-eat-FP>
        'Have had one's meal. (It's over.)' / 'Haven't had one's meal yet.'

No other RVC is omitted in the negative. In fact the incompatibility or lack of compatibility with the existential negation relates it to the suffix -*le* which also cannot occur in the negative. In that regard, GUO_2 resembles the verbal suffix -*le*, not an RVC such as *wán*.

3.4. Suffixation by -*le*

It has been noted that the phase complement *guo* can be suffixed by -*le* (Chao 1968, Teng 1973, Mangione and Li 1993). For example:

(19)   我吃过了饭就走。
     Wǒ chī.guò-le fàn jiù zǒu.
     <I-eat-GUO_2-SV[LE]-food-then-go>
     'I will go as soon as I have finished my dinner.' (Chao 1968: 450)

The possibility of suffixation by -*le* clearly shows, on the one hand, that GUO_2 is a verbal complement, closely related to RVCs and, on the other hand, that GUO_1 and GUO_2 belong to two distinct morphosyntactic categories (they do not occur at the same point of a syntactic chain). In a linear sequence, GUO_2 occupies the same place as an RVC.

3.5. Aspectual meaning

The phase complement has evolved a specific aspectuo-temporal meaning. I show below that it marks an instantaneous passage into the class of the past events (an abrupt transition).

What most clearly sets it apart is its grammatical meaning. GUO_2 relates to a reference time (RT), itself computed relative to the time of speaking, just like the suffixes -*le*, -*zhe* and -*guo*. That is, it refers to a reference point external to the process/event, while RVCs make reference to the internal semantic structure of processes/events prior to any temporal anchoring. GUO_2 thus expresses "viewpoint aspect" and not "situation aspect", as all other RVCs do. For a technical discussion of these notions, cf. Verkuyl 1993 and Smith 1997.

4. The grammatical meaning of *guo*₁

The operation of which the suffix -*guo* is the trace at surface level can be defined as a certain type of temporal location. -*Guo* locates the event symbolized by the predicative relationship within a given period of time.

There is a formal similarity between the utterances in -*guo* (quantification of the predicative relationship) and the utterances which assert the existence of a noun (nominal quantification), between temporal and spatial dimensions. Compare:

PREDICATIVE RELATIONSHIP

(20)   去年他接触过外国人。
     Qùnián tā jiēchù-guo wàiguórén.
     <last year-s/he-come into contact with-GUO_1-foreigner>
     'Last year s/he met with foreigners.'
     [This happened to him/her at least once during that period.]

(21)   去年他接触过两次外国人。
        Qùnián tā jiēchù-guo liǎng cì wàiguórén.
        <last year-s/he-come into contact with-GUO$_1$-two-CL$_V$-foreigner>
        'Last year s/he met with foreigners twice.'

NOUN

(22)   门口有人。
        Ménkǒu yǒu rén.
        <entrance-have-human>
        'There is someone at the door.' [at least one person]

(23)   门口有两个人。
        Ménkǒu yǒu liǎng ge rén.
        <entrance-have-two-CL$_N$-human>
        'There are two people at the door.'

-Guo implies the partition of the class of temporal points – built in relation to a given point of reference (normally the time of speaking) – into two disjoint subclasses, which might be called "past" and "present" with respect to this reference point. It signifies that in the subdomain "past" there is at least one occurrence of the event represented by the predicative relationship, that is to say at least one occurrence of that type (qualitative occurrence).

With *-guo*, one is interested neither in the event's boundaries nor phases, but solely in its existence. The event is not viewed in its internal development, but globally as something compact, as a fact. This is indicative of the aoristic character of the suffix *-guo*.

We are dealing here with a genuine assertion of existence. There is at least one temporal point *t* by which the predicative relationship is located. With *-guo*, the temporal points comprised in the interval prior to the point of reference are viewed only as appertaining to a class, the linearity of time being suspended. It is a relation of equivalence rather than of order.

If the temporal points prior to the point of reference are viewed as locators of events, one may construct the class of the anterior facts. Let <a r b> stand for the predicative relationship. *-Guo* then indicates that among all the facts prior to the point of reference, there is at least one of the type <a r b>. In other words, with *-guo*, one delimits within the class of the anterior facts the subclass of those exhibiting the feature <a r b>. It is a matter of a non-empty class (subclass), having at least one occurrence.

One of the essential characteristics of a class of occurrences is that the occurrences are at the same time qualitatively identifiable (and consequently, from this point of view, equivalent to each other), but quantitatively distinguishable. The fragmentation into occurrences presupposes discretization and entails the properties of both countability and iteration. This excludes any singling out of one particular occurrence, which on the aspectuo-temporal level means establishing a discontinuity between the event and the point of reference.

Recurrence

For an event to be compatible with *-guo*, its semantic properties should make it separable from the point of reference. This rules out both actions which lead to irreversible states, and states which, once established, never disappear. However, this does not necessarily boil down to the semantic condition of recurrence. Therefore the latter is too strong. In this regard, Chen's (1979: 28–9) argumentation can hardly be refuted.

(24)   你也年轻过。
        Nĭ yĕ niánqīng-guo.
        <you-also-young-GUO$_1$>
        'You were young once (before).'

He observes that "being young" is clearly not an experience which may recur but *-guo* can be used.

   In fact recurrence is merely a sufficient semantic condition. It is sufficient indeed that an event be recurrent to be compatible with *-guo*. Yet this is not a necessary condition since there are non-recurrent states, such as *niánqīng* "to be young", which are also compatible with *-guo*. Xiao and McEnery (2004: 147) arrive at the same conclusion: "repeatability of a situation is a *sufficient*, but not a *necessary* condition for it to take the experiential *-guo*".

   The necessary semantic condition is in fact the possibility of viewing the event as a non-empty class of occurrences. Everything else, especially the separability from the point of reference, stems from that. In particular, it is because an adjectival verb like *niánqīng* fulfils this condition that it can take *-guo*. Two different cases are to be distinguished accordingly:

(a)   The case of actions (verbs of action), where the necessary condition stated above systematically results in recurrence.
(b)   The case of states (expressed notably by adjectival verbs), where the absence of recurrence does not necessarily prevent the co-occurrence with *-guo*. For events of this kind, the condition of recurrence turns out to be on the whole too restrictive.

Recurrence is the most usual but by no means automatic consequence of the construction of a class of occurrences. It is always verified for actions, but not necessarily for stative situations.

5. The grammatical meaning of *guo$_2$*

The phase complement *guo* marks the passage of an identified occurrence of the event referred to by the predicative relationship into the class of the past events. It is a question of a definite occurrence (an expected event), whose existence is presupposed. As soon as the event has passed the dividing line between the (relative) "present" and "past", it becomes an element of the class of past events. Note that by virtue of the passage (into the past), the event is disconnected from RT (reference time), only the passage itself is connected to and can be validated at RT. The entry into the class is interpreted as a resultative state of the passage, as evidenced by the possibility of suffixation by *-le* (see above). The fact that the

time that has elapsed since the passage (i.e. the duration of the resulting state) may be measured constitutes an additional proof of this.

The correlation between GUO_2 in the affirmative and *hái méi (yǒu)* "have not yet" in the negative shows that we are dealing with a preconstruction: the event was expected, it was to take place. The presence of GUO_2 indicates conformity or congruence between this preconstruction (what was expected) and what actually happened.

The phase complement is concerned only with the temporal passage of the event, regardless of what stage (phase), quantity or result it has attained.

6. The unification of GUO_1 and GUO_2

We can now unify GUO_1 and GUO_2 at a theoretical level. The two aspectuo-temporal values that come from the verb *guò* "to cross, pass" actually reflect one and the same complex operation: the division of the class of temporal points, constructed relative to a given reference time (normally the moment of speaking) into two disjoint subclasses, that may be called "past" and "present" with respect to that time, and the location of the event represented by the predicative relationship within the past subdomain. They represent its two facets, static (GUO_1) and dynamic (GUO_2).

It is the orientation of the relationship "locator-locatum" that differs. With GUO_1, one goes from the locator (the past taken as a set of past events) to the locatum (the event referred to by the predicative relationship <a r b>): LOCATOR $\rightarrow$ LOCATUM. With GUO_2, one goes from the locatum (the event) to the locator (the past) LOCATUM $\rightarrow$ LOCATOR. This can be written schematically as follows:

GUO_1: **the past $\supset$ E < a r b>**
The past includes (is the locator for) one or more occurrences of the event <a r b>.

GUO_2: **E < a r b> $\subset$ the past**
The event <a r b> is included (located) in the past.

Both situate relative to the past. However, while the first case (GUO_1) falls within the predication of existence, the second (GUO_2) is a location in the sense that we locate entities in space-time, that is, specify or identify the position of something with respect to a reference point or a spatio-temporal reference frame.

Existence (GUO_1): In the past, there are one or more instances of the event <a r b>. Among the past events, there is at least one of the <a r b> type. Such an event occurred before. [This took place at least once.]

Location (GUO_2): It's over. (It's done.) The event <a r b> – an expected, determined, occurrence – has happened, that is, has joined the class of past events. The event <a r b> has passed and is now in the domain of the past.

In terms of orientation of the relationship of location, we have with the suffix -*guo* (GUO$_1$) and the phase complement *guo* (GUO$_2$) the same division of labour on the temporal plane as with *yǒu* "have/exist" and *zài* "be located" on the spatial plane. Compare:

GUO$_1$

(25)   我吃过鱼翅。
　　　Wǒ chī-guo yúchì.
　　　<I-eat-GUO$_1$-shark's fin>
　　　'I have eaten shark's fin before.' [at least once].

GUO$_2$

(26)   我吃过鱼翅。
　　　Wǒ chī.guo yúchì.
　　　<I-eat-GUO$_2$-shark's fin>
　　　'I have eaten **the** shark's fin.' [I am ready for the next course.]

yǒu

(27)   桌子上有书。
　　　Zhuōzi shàng yǒu shū.
　　　<table-on-have-book>
　　　'There is/are **a** book/book**s** on the table.' [at least one]

zài

(28)   书在桌子上。
　　　Shū zài zhuōzi shàng.
　　　<book-be located-table-on>
　　　'**The** book(s) is (are) on the table.'
　　　[In the context, one knows exactly what book(s) we are talking about.]

The only difference is that with GUO$_2$ location has a dynamic reading and not a static one as with *zài*. Indeed, the phase complement entails an active interpretation of location. The proof of this is, as noted above, that GUO$_2$ can be suffixed by the completion marker -*le*, in which case the passage among the past facts is explicitly presented as the result of the action of "passing".

The change of orientation (direction) induces a change in the determination of the event referred to. GUO$_1$ involves interchangeable, indefinite occurrences, representative of a class or type. It has a generic value. GUO$_2$ deals with a definite occurrence, uniquely determined (identified) in the context. It has a specific value. The distinction between generic and specific is basically a difference in definiteness. The expression of definiteness may be covert, as in Chinese, or overt, as in English or French.

In summary, in all cases GUO marks that an event **took place**: either (GUO$_1$) that in the past there is at least one occurrence of such an event (*chī-guo Zhōngguó fàn* 'have eaten Chinese food before'); or (GUO$_2$) that a uniquely identified (expected) event has happened, is over (*chī.guo fàn* 'have had one's meal, it's done').

The event is grasped globally, considered as a single unit, as a fact, regardless of its internal structure (phases or stages of its development). This presupposes

an external point of view. It is as if, with GUO (both the suffix -*guo* and the phase complement *guo*), the past were broken up into a series of facts that are not only disconnected from the reference point, but also from one another. GUO possesses aoristic features. By elucidating the behaviour of the aspect marker GUO in Mandarin Chinese, this article contributes to a better understanding of the aoristic aspect in general.

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