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The Chameleon in the Chinese Individual Exceed Comparative*

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The X A-*le* D construction is an explicit individual exceed comparative, in which the aspectual suffix *-le* licenses the covert individual-denoting compared object *pro*. The reference of this compared object is chameleon-like, which makes it possible for this type of comparative to be ambiguous between the stative and the dynamic meaning. Since this compared object is not a degree term, the differential measure phrase inside becomes the only possible candidate that can indirectly bind the degree argument of the adjective by restricting the degree argument that represents the difference between the compared objects.

Key words: explicit/individual exceed comparison, *-le*, individual-denoting *pro*

1. Introduction

Zhu Dexi (1982:55-57) formulates condition (1a-b) to distinguish Chinese verbs from gradable adjectives:

(1) a. Whether it can take any degree modifier like *hen* 'very'
b. Whether it can take any object

The object in (1b), as Zhu suggests, should be limited to the genuine object rather than the pseudo-object (*zhun binyu*) such as *shi-liang* 'measure phrases of time', *dong-liang* 'measure phrases of verbs', *chengdu zhun binyu* 'measure phrases of degree functioning as a pseudo-object', the locative NP or the 'object' of existential verbs, as shown by (2a-e), respectively.[1]

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[1] For ease of exposition, the author begins the paper with Zhu's (1956) definition of Chinese (gradable) adjectives. As will be implicit in the paper, the author believes that Chinese has the category of adjective, and that it can be defined as follows: a gradable adjective has a degree argument that must be saturated and restricted by comparatives, the *pos* morpheme, degree

(2) a. Xiuxi-le yi hui-er.
Rest-ASP one moment
'Take rest for a moment.'
b. Xing-le liang hui.
Revive-ASP two time
'Someone has revived two times.'
c. Da-le yi-dian-er.
Big-ASP a-little-bit
'(Something) is a little bit larger than the norm size assumed by the speaker.'
d. Fei Kunming.
Fly Kunming
'This flight is to Kunming.'
e. Lai-le ge keren.
Come-ASP CL guest
'Here comes a guest.'

Assuming such a definition to identify the category of adjectives for Chinese, Zhu (1982) further points out that a Chinese adjective can serve as predicate only in the following sentence patterns:[2]

(3) a. Zhe-duo hua hong, na-duo huang.
This-CL flower red that-CL yellow
'This flower is red, but that one is yellow.'
b. Zhe-duo hua hen/feichang hong.
This-CL flower very/extremely red
'This flower is very/extremely red.'

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adverbs, measure phrases, or reduplication morphology (cf. von Stechow 1984 and Kennedy & McNally 2005a, b). Also see Zhu (1956, 1980, 1982), Chao (1968), Li & Thompson (1981), McCawley (1992), Paul (2005) and many others for further discussion. Since the question of Case-assignment to the pseudo-object in cases like (2c) is beyond the scope of this study, we shall not discuss it for the rest of this paper.

Abbreviations used in this paper are as follows: Adj: adjectives; ASP: aspect markers; CL: classifiers; D: the differential; DE: verbal suffix or marker for modifying phrases like genitive phrases, relative clauses, and noun complement clauses; *-le*: the realization aspectual suffix; and SFP: sentence final particles.

[2] Examples like (i) and (3b), as Zhu (1980) suggests, belong to the same type.

(i) Zhe-ke shu you gao you da.
This-CL tree again tall again big
'This tree is both tall and big.'

c. Zhe-duo hua honghong-de.
This-CL flower red-red-DE
'This flower is really red.'

d. Zhe-duo hua hong-le yi-dian-er.
This-CL flower red-ASP a-little-bit
'This flower is a little bit redder than before/the standard value of redness assumed by people for the flower.'

e. Zhe-duo hua hong le.
This-CL flower red SFP
'This flower has gotten red. (The speaker announces a new 'discovery' of the redness of the flower.)'

The purpose of this paper is to study the syntax and semantics of sentences like (3d), especially the function that the aspectual suffix *-le* plays in this type of construction (henceforth we shall use the X A-*le* D construction to represent this type of sentences by having A represent adjective, *-le* the aspectual suffix *-le*, and D the differential between the two compared objects such as *three centimeters* in *John is three centimeters taller than Bill*), and the question of why the differential pseudo-object (i.e. the post-adjectival quantifier) inside is obligatory. We shall argue that the X A-*le* D construction is a type of explicit individual exceed comparatives, in which the aspectual suffix *-le* licenses the covert individual-denoting compared object *pro* (cf. Cheng 1988, Kennedy 2005).

This paper proceeds as follows. In §2, we shall discuss the syntactic and semantic properties of the X A-*le* D construction; this discussion will help us to crystallize the questions this article addresses. In §3, some previous literature on the X A-*le* D construction will be reviewed. Section 4 begins by briefly introducing two preliminaries, the theory proposed by von Stechow (1984) and Kennedy & McNally (2005a, b) on (gradable) adjectives and degree terms and Xunning Liu's (1988) proposal on the semantic nature of Chinese aspectual suffix *-le*, and ends with our proposal. Some theoretical and empirical consequences of our analysis are discussed in §5, and finally, the concluding remarks are stated in §6.

2. The syntactic and semantic properties of X A-*le* D construction

The X A-*le* D construction has the following syntactic and semantic characteristics: First, this type of construction, according to Lü et al. (1980:317), might have a dynamic or a stative interpretation, depending on whether the subject has the ability of changing along the scale associated with the adjective or not, as illustrated by (4a-b), respectively.

(4) a. Toufa bai-le yi-dian-er.
Hair white-ASP a-little-bit
'The hair becomes a little bit grayer than before/the standard value of gray assumed for human hair.'

b. Zhe-shuang xiezi da-le yi hao.
This-CL shoe big-ASP one number
'This pair of shoes is one number larger than the normal size assumed by people in the discourse.'

Namely, in addition to the stative reading (i.e. the hair is a little bit grayer than the standard value of gray assumed for human hair), example (4a) has the other interpretation, expressing that the color of the hair changes along the gray-scale and the differential between the current degree of gray and that before is overtly expressed by the pseudo-object *yi-dian-er* 'a-little-bit'. Since the second reading of (4a) denotes a changing process along the gray-scale, the dynamic sense (or degree achievement) comes out naturally. In contrast, (4b) simply denotes a state, meaning that the size of that pair of shoes is one number larger than the standard size of shoes assumed by people in the discourse.

Second, the X A-*le* D construction like (5a), in addition to the dynamic and the stative reading, might have a third interpretation similar to that denoted by (6). Namely, (5a), besides the dynamic and the stative reading, also conveys a meaning, expressing that this flower is redder than some specific flower. However, example (5b), which differs from (5a) in that the adjective inside does not take the aspectual suffix *-le*, can only have the meaning denoted by (6).[3] In other words, absence of the aspectual suffix

[3] We have strong evidence to believe that (5a) is not derived from (ii) by deleting the *bi*-phrase 'compare-phrase' *bi mouyi-duo hua* 'compare some-CL flower' because Affect α, including Move α and Delete α, cannot change meaning. Although example (5a) is three-way ambiguous, it is plausible for us to say that (5a) in fact is only ambiguous between the meaning of *this flower became a little bit redder than before* and the meaning of *this flower is a little bit redder than the standard value of redness assumed by people in the discourse*. The third meaning (i.e. *this flower is a little bit redder than some specific flower*) in fact can be considered as one denoted by the reduced form of (ii) that happens to be identical to (5a) in the phonetic form.

(i) Zhe-duo hua hong-le yi-dian-er.
This-CL flower red-ASP a-little-bit
'This flower is a little bit redder than before/the standard value of redness assumed by people in the discourse.'

(ii) Zhe-duo hua bi mouyi-duo hua hong-le yi-dian-er.
This-CL flower than some-CL flower red-ASP a-little-bit
'This flower is a little bit redder than some specific flower.'

Hence, in the remainder of this paper, we shall not discuss the 'third' reading shown by examples like (5a).

-le makes the sentence unambiguous, as the contrast between (5a) and (5b) shows.

(5) a. Zhe-duo hua hong-le yi-dian-er.
This-CL flower red-ASP a-little-bit
'This flower becomes a little bit redder than before/the standard value of redness assumed by people for the flower/some specific flower.'
b. Zhe-duo hua hong yi-dian-er.
This-CL flower red a-little-bit
'This flower is a little bit redder than some specific flower.'

(6) Zhe-duo hua (bi mouyi-duo hua) hong yi-dian-er.
This-CL flower (than some-CL flower) red a-little-bit
'This flower is a little bit redder than some specific flower.'

Third, the pseudo-object or measure phrase in the X A-*le* D construction, for example *san gongfen* 'three centimeters' in (7b), can only be interpreted as differential. Moreover, if the measure phrase is be deleted, the sentence will become ungrammatical, as the contrast between (7a) and (7b) illustrates.

(7) a. *Zhe-ge haizi gao-le. (with the meaning of (7b))
This-CL child tall-ASP
b. Zhe-ge haizi gao-le san gongfen.
This-CL child tall-ASP three centimeter
'This child is three centimeters taller than before/the standard height of children assumed by people.'

According to Sapir (1944), languages differ in their inventory of degree morphology. Some have no (overt) comparative morphology. For languages of this type, they have implicit comparison (cf. Kennedy 2005).

(8) a. *Implicit Comparison*
Establish an ordering between objects *x* and *y* with respect to gradable property *g* using the positive form by manipulating the context or delineation function in such a way that the positive form true of *x* and false of *y*.
b. *Explicit Comparison*
Establish an ordering between objects *x* and *y* with respect to gradable property *g* using special morphology whose conventional meaning has the consequence that the degree to which *x* is *g* exceeds the degree to which *y* is *g*.

Significantly here, the measure phrase can only be assigned differential interpretation in the explicit comparatives, as the contrast between (9a) and (9b) illustrates.

(9) a. John is 10 centimeters taller than Bill. (explicit comparison)
b. ?? Compared to Bill, John is 10 centimeters tall. (implicit comparison)

The fact that the measure phrase in the Chinese X A-*le* D construction like (7b) can only be interpreted as differential immediately leads us to suggest that the Chinese X A-*le* D construction is a type of explicit comparatives.

Fourth, Chinese comparatives, either the type like (10a) or (10b) (henceforth the X A (Y) D comparative), the compared object must be an individual-denoting NP rather than a measure or quantity phrase that denotes a degree.

(10) a. Zhangsan bi Lisi/*yi-bai qi-shi gongfen gao wu gongfen.
Zhangsan compare Lisi/*one-hundred-seventy centimeters tall five centimeter
'Compared with Lisi/*one hundred and seventy centimeters, Zhangsan is five centimeters taller.'
b. Zhangsan gao Lisi/*yi-bai qi-shi gongfen wu gongfen.
Zhangsan tall Lisi/*one-hundred-seventy centimeters five centimeter
'Zhangsan is five centimeters taller than Lisi/*one hundred and seventy centimeters is.'

This characteristic shared by Chinese comparatives reminds us the following differences between Chinese and English comparatives. (A) Differing from English comparatives, complex standards must be relative clauses in Chinese comparatives, either the type like (11b) or (11c) (cf. Fu 1978, Kennedy 2005):

(11) a. *Zhangsan bi Lisi mai shu mai duo qianbi.
Zhangsan compare Lisi buy book buy more pencil
'Zhangsan bought more pencils than Lisi bought books.'
b. Zhangsan mai de qianbi bi Lisi mai de shu duo.
Zhangsan buy DE pencil compare Lisi buy DE book more
'The pencils that Zhangsan bought were more than the books that Lisi bought.'

c. Zhangsan mai de shu duo Lisi mai de bijiben san-ben.
Zhangsan buy DE book more Lisi buy DE notebook three-CL
'The books that Zhangsan bought are three more than the notebooks that Lisi bought.'

(B) Chinese comparatives, either the type like (10a) or (10b), do not allow the adjectival sub-deletion, but the same does not happen in English comparatives (cf. Fu 1978, Kennedy 2005):

(12) a. *Zhe-tiao he bi shen kuan.
This-CL river compare deep wide
'This river is wider than it is deep.'
b. Zhe-tiao he de kuandu bi shendu da.
This-CL river DE width compare depth great
'The width of this river is greater than its depth.'
c. Zhe-tiao he de kuandu duo ta-de shendu san gongchi.
This-CL river DE width more its depth three meters
'The width of this river is three meters greater than its depth.'

Following Kennedy (2005), we suggest that the semantics of explicit comparison in Chinese and English differs in that the former involves individual comparison only while the latter the individual or the degree comparison. The X A (Y) D explicit comparatives like (13a) further show that the individual-denoting compared object can be deleted, as the contrast below illustrates.

(13) a. Zhangsan gao Lisi shi gongfen.
Zhangsan tall Lisi ten centimeter
'Zhangsan is ten centimeters taller than Lisi.'
b. Zhangsan gao shi gongfen.
Zhangsan tall ten centimeter
'Zhangsan is ten centimeters taller.'

However, the X A-*le* D explicit comparative does not tolerate insertion of an individual-denoting compared object in the position between the inflected adjective and the differential measure phrase, as the ungrammaticality of (14b) shows.

(14) a. Zhangsan gao-le yi-dian-er.
Zhangsan tall-ASP a-little-bit
'Zhangsan is a little bit taller than before/the standard value of height assumed by people.'
b. ?* Zhangsan gao-le Lisi yi-dian-er.
Zhangsan tall-ASP Lisi a-little-bit

One way of putting this point is as follows: occurrence of the aspectual suffix *-le* excludes the possibility of inserting an overt individual-denoting expression like *Lisi* as the compared object in between the inflected adjective and the differential measure phrase (cf. (14b)). So, if the X A-*le* D explicit comparative involves individual comparison, then what is the individual-denoting compared object?

Fifth, absolute (or non-gradable) adjectives, like *zhen* 'true', *jia* 'fake', *dui* 'right', *cuo* 'wrong', *heng* 'athwartship', *shu* 'acock', *wen* 'warm', and *zi* 'purple', are not allowed in the X A-*le* D construction, as (15a-h) illustrate (cf. Zhu 1980).[4]

(15) a. *Ta-de shuofa zhen-le yi-dian-er.
His saying true-ASP a-little-bit
b. *Zhe-zhi Gucci biao jia-le yi-dian-er.
This-CL Gucci watch fake-ASP a-little-bit
c. *Ni-de da'an dui-le yi-dian-er.
Your answer right-ASP a-little-bit
d. *Ni-de da'an cuo-le yi-dian-er.
Your answer wrong-ASP a-little-bit
e. *Zhe-tiao xian heng-le yi-dian-er.
This-CL line athwartship-ASP a-little-bit

[4] As native speakers' judgment indicates, (15a-h) are not quite consistent on acceptability, especially (15f-g). So, it is arguably true that, in some sense, absolute adjectives like *wen* 'warm' and *zi* 'purple' allow an imprecise use that reflects a semantic shift away from 'default' absolute quality meaning toward a purely relative one. This phenomenon might imply that *wen* 'warm' and *zi* 'purple' are not typical absolute adjectives. Or, following Kennedy & McNally (2005a), we might claim that the felicity and informativity shown by (15f-g) can be explained in terms of general pragmatic principles governing the interpretation of 'loose talk', for example Lasersohn's (1999) theory of pragmatic halos, which provides a framework for determining how much deviation from what is actually true still counts as 'close enough to the truth'. See footnote 9 for further discussion.

f. ?? Zhe-bei shui wen-le yi-dian-er.
This-CL water warm-ASP a-little-bit
g. ? Zhe-kuai bu zi-le yi-dian-er.
This-CL cloth purple-ASP a-little-bit
h. * Zhe-ke shu shu-le yi-dian-er.
This-CL tree acock-ASP a-little-bit

Sixth, as Chao (1968:246), Li & Thompson (1981:185), Zhu (1982:68), Lü et al. (1980:317) and many others suggest, the aspect marker *-le* in Chinese always denotes perfectivity; namely, it indicates an event is viewed in its entirety or as a whole, as shown below.

(16) Wo yijing wen-le Laowang.
I already ask-ASP Laowang
'I have already asked Laowang (something).'

Although *-le* is always considered a perfective aspect marker, this claim, as Zhu (1982: 68) as well as Lü et al. (1980:317) points out, is challenged by examples like (17a-b).

(17) a. Duan-le yi cun.
Short-ASP one inch
'(Something) is one inch shorter.'
b. Toufa bai-le yi-dian-er.
Hair white-ASP a-little-bit
'The hair becomes a little bit grayer than before/the standard value of gray assumed for human hair.'

Since an adjective denotes a state that can never be bounded temporarily, spatially or conceptually, examples (17a-b) immediately question the claim that *-le* is a perfective aspect marker (cf. Huang 1988).[5] Given examples like (17a-b), Zhu (1982:69) suggests that whenever an adjective takes the aspectual suffix *-le*, a post-adjectival pseudo-object like *hen duo* 'very much', *hao duo* 'many', or *bu shao* 'much' is obligatorily required,

[5] Li & Thompson (1981:185) suggest that the aspect suffix *-le* expresses perfectivity; that is, it indicates that an event is being viewed in its entirety or as a whole. And an event is viewed in its entirety if it is bounded. To explain cases like (17a-b), Li & Thompson (1981:188) suggest that a bounded event can be a state whose limits are set by a phrase expressing the extent to which the subject is in that state. This claim, however, is immediately challenged by the question: how can a state have limits?

and such a construction (i.e. the X A-*le* D construction), as Zhu (1982:69) suggests, expresses realization of the state denoted by the adjective.

Discussions above immediately bring us to the following questions that any theory about the X A-*le* D construction has to address: (A) What kind of function does the aspectual suffix *-le* play in the X A-*le* D construction? This question in fact is related to the syntactic and semantic nature of the aspectual suffix *-le*. (B) Why is the differential pseudo-object obligatory (cf. (7a-b))? (C) Why is (5a) ambiguous but (4b) not? And (D) how do examples like (5a) differ from those like (5b) syntactically and semantically?

Before making a proposal in §4, we shall briefly review some previous studies on the X A-*le* D construction in §3.

3. Previous analyses

Zhu (1982:69) points out that whenever an adjective takes the aspectual suffix *-le*, a post-adjectival quantifier that denotes the differential between the two compared objects is obligatorily required. This construction (i.e. the X A-*le* D construction), as Zhu (1982) argues, always expresses realization of the state denoted by the adjective, for example (18).

(18) Duan-le yi cun.
Short-ASP one inch
'(Something) is one inch shorter than before/the standard value of length assumed by people in the discourse.'

There is no denying that Zhu (1982) gives a precise description for the syntax and semantics of the X A-*le* D construction, but in the same section of his (1982:68) book, Zhu also points out that *-le*, when being attached to an action verb, expresses prefectivity. Hence, Zhu (1982) simply gives us a taxonomic description rather than a unified analysis for the nature of the aspectual suffix *-le*. Besides, Zhu (1982) neither touches the question of why the differential pseudo-object is obligatory in the X A-*le* D construction nor provides any explanation for the question of what kind of function the aspectual suffix *-le* plays in the X A-*le* D construction. In addition, Zhu (1982) does not explain why (19a) is ambiguous but (19b) is not.

(19) a. Toufa bai-le xuduo.
Hair white-ASP some
'The hair is a little bit grayer than before/the standard value of gray assumed for human hair.'

b. Zhe-shuang xiezi da-le yi hao.
This-CL shoe big-ASP one number
'This pair of shoes is one-number larger.'

Although Lü et al. (1980:317) clearly point out that the X A-*le* D construction might have two different interpretations: a dynamic and a stative one (cf. (19a-b)), Lü et al. (1980), like Zhu (1982), simply give a description instead of an analysis with explanatory adequacy for the X A-*le* D construction. Furthermore, Lü et al. (1980) does not touch the question of why (19a) is ambiguous but (19b) is not, either.

Without distinguishing the verbal (i.e. the aspectual suffix) -*le* from the sentence final particle *le*, Huang (1988:188-190) suggests that there is only one morphemic *le* in Chinese and the semantic function of *le* is better interpreted as marking boundary. The verbal suffix -*le*, as an allomorph of *le*, functions to mark an event boundary, and its absence produces semantic vagueness/indeterminacy so that more than one reading is allowed. For example, the occurrence of -*le* in (20a) denotes the focused aspect and the absence in (20b) the diffuse.

(20) a. Lisi tiao-le sheng le.
Lisi jump-ASP rope SFP
'Lisi has jumped (a) rope now.'
b. Lisi tiao sheng le.
Lisi jump rope SFP
i. 'Lisi has jumped (a) rope.'
ii. 'Lisi has begun jumping a rope.'
iii. 'Lisi jumped a rope.'

Namely, the verbal -*le* in (20a), as Huang (1988:189) suggests, signals the fact that Lisi's rope jumping is completed, and he is no longer jumping a rope. Without the verbal -*le*, (20b) does not necessarily express such inactivity; in other words, the event *tiao sheng* 'jump rope' may be implemented, but need not have been. Assuming that *gao* 'tall' is a stative verb, Huang (1988:192) analyzes -*le* in (21) as the verbal -*le*, which functions as a boundary marker.[6]

(21) Lisi gao-le san cun.
Lisi tall-ASP three inch

[6] Huang's (1988) reading (iii) for (21) (i.e. Lisi's height exceeds some arbitrarily determined height) in fact can be regarded as a specific case of reading (ii).

i. 'Lisi has grown three inches taller.'
ii. 'Lisi is three inches taller than the average.'
iii. 'Lisi is three inches too tall.'

Examples like (21), in which a stative verb co-occurs with the verbal *-le*, as Huang (1988:192) points out, show the effect of comparison. And the first reading of (21) indicates that some "action" is imputed to the stative verb *gao* 'tall' and that "action" is now bounded or completed while the last two readings indicate that Lisi's height exceeds some standard (e.g. the average or some arbitrarily determined height) that defines the boundary.

Although Huang's (1988) analysis is quite insightful, there are still some holes. First, Huang (1988) says that in (21) some "action" is imputed to the stative verb *gao* 'tall'. This saying sounds unnatural. How can a stative verb denote an action?

Second, for someone to hold a state, s/he has to satisfy the basic standard value (or requirement) of that state. A state has a standard value but no boundaries. So, how can we use a standard to define the notion of boundary for a state?

Third, Huang's (1988) analysis fails to explain why (21) is ambiguous but (22) is not.

(22) Zhe-shuang xiezi xiao-le yi-dian-er.
This-CL shoe small-ASP a-little-bit
'This pair of shoes is a little bit smaller.'

Fourth, Huang's (1988) analysis cannot explain why the differential in the X A-*le* D construction is obligatory.

Kuo-Ming Sung (2004), based on his taxonomic description for the characteristics of the X A-*le* D construction, argues that, besides *-le*$_1$ (i.e. the verbal suffix *-le*) and *le*$_2$ (i.e. the sentence final particle *le*), we need another *le* (i.e. *le*$_3$). Quite obviously, Sung's (2004) proposal is also a taxonomic one, and this way of analysis fails to explain the four questions aroused by the X A-*le* D construction, too.

4. Analysis

For the sake of reader-friendliness and ease of exposition, we shall briefly introduce our proposal first. Following this is the preliminary of our analysis, and then details of the proposal will be provided.

In a nutshell, our proposal aiming to account for the questions arising from the X A-*le* D construction is as follows: assuming the theory of (gradable) adjectives and degree terms proposed by von Stechow (1984) and Kennedy & McNally (2005a, b), we

suggest that the X A-*le* D construction is a type of explicit individual exceed comparatives, in which the aspectual suffix *-le* licenses the covert individual-denoting compared object *pro*. The reference of this compared object is chameleon-like, which causes some cases of the X A-*le* D comparative to be ambiguous between the stative and the dynamic meaning. The measure phrase, being the only degree term in the construction, functions to restrict the degree argument of adjective; therefore, it cannot be deleted.

4.1 The semantics of adjectives and degree terms

4.1.1 English adjectives and the *pos* morpheme

For the semantic type of gradable adjectives, we follow a well-established tradition and analyze them as relations between individuals and degree (cf. Seuren 1973, Cresswell 1977, Hellan 1981, von Stechow 1984, Heim 1985, Bierwisch 1989, Klein 1991, and Kennedy & McNally 2005a, b). For example, the gradable adjective *expensive* has the denotation in (23), where **expensive** represents a measure function that takes an entity and returns its cost, a degree on the scale associated with the adjective.

(23) [[expensive]] = $\lambda d \lambda x.$**expensive**(x) = d

The adjective *expensive* thus denotes a relation between degrees of cost d and object x such that the cost of x equals to d. Under this approach, the value of the degree argument is determined by degree morphology—in English, comparatives, degree modifiers, and measure phrases—that saturates and imposes restrictions on the degree argument. The comparative morphology *more…than*, for example, requires the degree argument of a gradable adjective to exceed some other degree (introduced by the *than* phrase). A natural question to ask at this point is how the degree argument of *fat* in (24a), in which neither comparative morphology, degree modifiers, nor measure phrase is found, gets restricted. For a sentence like (24a), von Stechow (1984:59-60) suggests that the simplest way of representing it is to leave the degree variable open, as (24b) illustrates.

(24) a. Ede is fat.
b. Ede is d-fat.

Although we can say that it is the task of context to specify the degree of fatness which Ede really has (i.e. the context had to specify the d-variable), von Stechow (1984) points out that this approach would not be satisfactory. The meaning of (24a) cannot be satisfied by just any degree because everyone is fat in some sense. (24a), as von Stechow (1984) argues, in fact means something like 'Ede is positively fat'. The operator 'positive'

(henceforth the *pos* morpheme) is invisible, and the rough semantics of it is something as in (25), taken from von Stechow (1984:60).

(25) Positive
Let A^0 be any adjective meaning, C be any appropriate property, x be any appropriate individual and w be any world. Then w $||pos||(A^0)(C)(x)$ iff $(\exists d)$[d is an A^0-degree & d > average $[A^0, C]$ and x had d in w & w $\in$ C(x)].

Following Kennedy & McNally (2005a:350), we further suggest that the *pos* morpheme encodes the relation **standard**, which holds a degree *d* just in case it meets a standard of comparison for an adjective *G* with respect to a comparison class determined by **C**, a variable over properties of individuals whose value is determined contextually.

(26) $[[pos]] = \lambda G \lambda x.\ \exists d[\textbf{standard}(d)(G)(\textbf{C}) \wedge G(d)(x)]$

Restrictions imposed by the standard relation, as Kennedy & McNally (2005a:350) argue, vary depending on lexical features of the adjective. Seen in this way, the predicate *fat* in (25a) has a denotation like (27).

(27) $[[pos]]([[\text{fat}]]) = \lambda x.\ \exists d[\textbf{standard}(d)(\text{fat})(\textbf{C}) \wedge [[\text{fat}]](d)(x)]$

Simply put, it is the *pos* morpheme, suggested by von Stechow (1984), that saturates and imposes restrictions on the degree argument of the adjectival predicate *fat*. At this point, we are reminded of the contrast between (23a) and (28b) in grammaticality.

(28) a. Zhe-ge nühai *(hen) piaoliang.
This-CL girl very beautiful
'This girl is very beautiful.'
b. This girl is (very) beautiful.

The contrast above might lead us to assume that Chinese does not have the *pos* morpheme; however, the question of whether Chinese has the *pos* morpheme is not directly related to the main them of this article but is also beyond the scope of this paper. So, we shall not discuss it for the rest of this paper. Instead, in the following we shall briefly introduce how degree adverbs and measure phrases saturate and restrict the degree argument of gradable adjectives.[7]

[7] In fact, the degree argument of Chinese gradable adjectives can be restricted by degree adverbs, measure phrases, reduplication morphology, (contrastive) focus, or the sentence final particle *le*,

4.1.2 Restriction on degree argument of Chinese gradable adjectives

4.1.2.1 Degree adverbs

In line with Kennedy & McNally (2005a:367) and many others, we suggest that degree morphemes denote functions from (gradable) adjective meanings to properties of individuals (they are <<d, <e, t>>, <e, t>>), the role of which is to saturate the degree argument of the adjective, and the meanings of degree morphemes can be characterized in terms of the template in (29), where **R** is some restriction on the degree argument of the adjective.

(29) $[[\text{Deg(P)}]] = \lambda G \lambda x.\ \exists d[\mathbf{R}(d) \wedge G(d)(x)]$

What distinguishes different degree morphemes from each other is the value of **R**—the specific restrictions they impose on the adjective's degree argument. Furthermore, as Kennedy & McNally (2005a) argue, the distribution of degree modifiers is sensitive to the scale structure (open versus closed) and standard value (relative versus absolute) of gradable adjectives. More precisely, proportional degree modifiers are only compatible with closed-scale (or absolute limit) gradable adjectives that map their arguments onto scales with maximal and minimal elements, while non-proportional ones with open-scale (or relative) gradable adjectives. For example, the proportional modifier *quan* 'completely'

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as examples below illustrate.

(i) Zhe-duo hua hong, na-duo huang.
This-CL flower red that-CL yellow
'This flower is red, but that one is yellow.'

(ii) Zhe-duo hua hen/feichang hong.
This-CL flower very/extremely red
'This flower is very/extremely red.'

(iii) Zhe-duo hua honghong-de.
This-CL flower red-red-DE
'This flower is really red.'

(iv) Zhe-duo hua hong-le yi-dian-er.
This-CL flower red-ASP a-little-bit
'This flower is a little bit redder than before/the standard value of redness assumed by people for the flower/some specific flower.'

(v) Zhe-duo hua hong le.
This-CL flower red SFP
'This flower has gotten red. (The speaker announces a new 'discovery' of the redness of the flower.)'

Given space limitations, in the following we only discuss cases containing degree adverbs and measure phrases.

in (30b) has a denotation along the lines of (30a), which restricts the degree argument of a gradable adjective to being maximum on the adjective's scale (cf. Kennedy & McNally 2005a:369) (Here S_G represents the scale associated with a gradable adjective G).[8]

(30) a. [[quan]] = $\lambda G \lambda x.\ \exists d[\mathrm{d} = \mathbf{max}(S_G) \wedge G(d)(x)]$
b. Zhe-kuai niupai quan shou.
This-CL steak completely cooked
'This steak is completely cooked (i.e. well done).'
c. [[quan]]([[shou]]) = $\lambda x.\ \exists d[\mathrm{d} = \mathbf{max}(S_{shou}) \wedge shou(d)(x)]$

The adjectival predicate *quan shou* 'completely cooked/well done', therefore, has a denotation like (30c), in which the degree argument of the closed-scale adjective *shou* 'cooked' is saturated and restricted by the proportional degree adverb *quan* 'completely'; hence, (30b) is grammatical. Similarly, in (31b) the degree argument of the (closed-scale) gradable adjective *touming* 'transparent' also gets saturated and restricted by the proportional degree adverb *ban* 'half', which has a denotation as in (31a) (Here **diff** is a function that returns the difference between two degrees).[9]

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[8] As the contrast between (i)-(ii) and (iii)-(iv) indicates, adjectives like *shou* 'cooked' and *touming* 'transparent' are compatible with proportional modifiers like *wu-fen* 'half', but incompatible with the degree adverb *hen* 'very', which requires the noun modified to be with a norm or average determined contextually.

(i) Zhe-kuai niupai wu-fen shou.
This-CL steak half cooked
'This steak is medium.'
(ii) Zhe-pian boli ban touming.
This-CL glass half transparent
'This piece of glass is half transparent.'
(iii) * Zhe-kuai niupai hen shou.
This-CL steak very cooked
(iv) * Zhe-pian boli hen touming.
This-CL glass very transparent

In other words, adjectives like *shou* 'cooked' and *touming* 'transparent' are the totally closed-scale (or absolute limit) gradable adjectives which map their arguments onto scales with maximal and minimal elements (cf. Kennedy & McNally 2005a).

[9] However, Chao (1968:678) points out that as common and acceptable usage goes, one does say sentences like (i), in which the predicate is an absolute (or non-gradable) (quality) adjective.

(i) Zhe-ge yuanquan hen yuan.
This-CL circle very round
'How round this circle is.'

Although it is arguably true that in some cases imprecise uses reflect a semantic shift away from

(31) a. [[ban]] = $\lambda G \lambda x.\ \exists d[\mathbf{diff}(\mathbf{max}(S_G))(d) = \mathbf{diff}(\mathrm{d})(\mathbf{min}(S_G)) \wedge G(d)(x)]$

b. Zhe-shan boli chuang ban touming.
This-CL glass window half transparent
'The glass of this window is half transparent.'

c. [[ban]]([[touming]]) = $\lambda G \lambda x.\ \exists d[\mathbf{diff}(\mathbf{max}(S_{touming})(d) = \mathbf{diff}(\mathrm{d})(\mathbf{min}(S_{touming})) \wedge touming(d)(x)]$

For non-proportional degree modifiers, let us take *hen* 'very' as example. According to Klein (1980), a predicate of the form *very Adj* is essentially the same way as its simple, unmodified counterpart, with one important difference: whereas the regular contextual standard is a degree that exceeds a norm or average of the relevant property calculated on the basis of an arbitrary, contextually determined comparison class, the *very* standard is a norm or average calculated in the same way but just on the basis of those objects to which the unmodified predicate truthfully applies (cf. von Stechow 1984, Kennedy & McNally 2005a:369). For example, in a context in which the standard of comparison for the adjective (phrase) *tall* is the average of degree of height for the comparison class *basketball players*, the standard of comparison for the AP *very tall* is an average of height for just the tall basketball players. As a result, some basketball players who count as 'tall' will not count as 'very tall', and the standard will be efficiently raised. So, Kennedy & McNally (2005a:370) implement Klein's (1980) analysis directly and suggest: in the case of *very*, the comparison class is lexically specified, and it is those objects that have the property *G* in the context of utterance. This is made explicit in (32), which specifies the denotation of *very* relative to a context *c*.

(32) $[[\text{very}]]^c = \lambda G \lambda x.\ \exists d[\text{standard}(d)(G)(\ \lambda y.[[pos(G)(y)]]^c) \wedge G(d)(x)]$

Hence, *hen gao* 'very tall' in (33) is true of the individual *Ming Yao* if the degree to which *Ming Yao* is tall exceeds a norm or average on the height scale for a comparison class based on those entities that have the property *positively tall* in the context of utterance.

'default' absolute quality meaning toward a purely relative one, we along the lines of Kennedy & McNally (2005a:357) suggest that there are both coherent and theoretical reasons and empirical arguments for maintaining the claim that absolute quality adjectives need to be semantically distinguished from relative gradable adjectives. As Kennedy & McNally (2005a) argue, the simplest strategy would be to claim that the propositions conveyed by sentences like (i) are strictly speaking false. Their felicity and informativity can be explained in terms of general pragmatic principles governing the interpretation of 'loose talk', for example Lasersohn's (1999) theory of pragmatic halos, which provides a framework for determining how much deviation from what is actually true still counts as 'close enough to the truth'.

(33) Ming Yao hen gao.
Ming Yao very tall
'Ming Yao is tall.'

The degree argument of the open-scale (or relative) gradable adjective *gao* 'tall', therefore, is saturated and restricted, and (33) is grammatical.

4.1.2.2 Measure phrases

Assuming Klein's (1980) theory on degree terms, Kennedy & McNally (2005a:368) analyze measure phrases as a type of degree term; for example, the measure phrase *two meters* can be assigned a denotation along the lines of (34a), where *two meters* is a degree on the scale that corresponds to a measure of two meters.

(34) a. $[[\text{two meters}]] = \lambda G \lambda x.\ \exists d[\text{d} \geq \textbf{two meters} \wedge G(d)(x)]$

b. $[[\text{two meters}]]([[\text{tall}]]) = \lambda G \lambda x.\ \exists d[\text{d} \geq \textbf{two meters} \wedge G(d)(x)]([[\text{tall}]])$
$= \lambda x.\ \exists d[\text{d} \geq \textbf{two meters} \wedge [[\text{tall}]](d)(x)]$
$= \lambda x.\ \exists d[\text{d} \geq \textbf{two meters} \wedge [\lambda d' \lambda y.\textbf{tall}(y)d'](d)(x)]$
$= \lambda x.\ \exists d[\text{d} \geq \textbf{two meters} \wedge \textbf{tall}(x) = d]$

The composition of *two meters tall*, as shown in (34b), indicates that this phrase denotes a property that is true of an object *x* if there is a degree that measures at least two meters and *x's* height is equal to that. In other words, a measure phrase, as Kennedy & McNally (2005b) suggest, maps a gradable adjective into a property of individuals by restricting the degree argument of the adjective based on the context of the degree expressed. In other words, measure phrases directly supply a value for the degree argument of the adjective and fix the standard degree that serves as the criterion for truthful ascription of a gradable predicate. Hence, the value of degree argument of *tall* is at least *two meters*. This immediately explains the fact that the measure phrase in cases like (35a-b) cannot be deleted; otherwise, the degree argument of the adjective cannot be restricted, as the contrast between (35a-b) and (36a-b) in grammaticality shows.

(35) a. Zhangsan gao yi-bai ba-shi gongfen.
Zhangsan tall one-hundred eight-ten centimeter
'Zhangsan is one hundred and eighty centimeters tall.'

b. Zhe-ke shu liang mi gao.
This-CL tree two meter tall
'This tree is two meters tall.'

(36) a. *Zhangsan gao.
Zhangsan tall
b. *Zhe-ke shu gao.
This-CL tree tall

Simply put, in Chinese, degree adverbs and measure phrases both play the same role to gradable adjectives: they both saturate and impose restrictions on the degree argument of gradable adjectives. At this point, can we simply say that, like the measure phrase in (35a-b), the measure phrase in the X A-*le* D construction, for example (37), functions to directly supply a value for the degree argument of the adjective and fix the standard degree that serves as the criterion for truthful ascription of a gradable predicate?

(37) Zhangsan gao-le san gongfen.
Zhangsan tall-ASP three centimeter
'Zhangsan is three centimeters taller than before/the standard value of height assumed by people.'

If so, the value of the degree argument of *gao* 'tall' in (37) should be *three centimeters*, contrary to fact. Hence, the measure phrase in the X A-*le* D construction should not function in a way the same as the measure phrase in (35a-b) does. Following Hellan (1981) and von Stechow (1984), we suggest that measure phrases with explicit comparatives can be handled by modifying the semantics of explicit comparison to introduce a degree argument that represents the difference between the compared objects.

In the following, we shall argue that, in the X A-*le* D construction, the aspectual suffix *-le* can be regarded as a marker not only to license the individual-denoting *pro* compared object, but also to distinguish two types of explicit individual exceed comparatives in Chinese.

4.2 The aspectual suffix *-le*: the licensing head of *pro*

4.2.1 The aspectual suffix *-le* as a realization aspect marker

Since Chao (1968) and work dating back to the 1960's, the semantic nature of aspectual suffix *-le* has been a hot debate issue among Chinese linguists (cf. Rohsenow 1978, Li & Thompson 1981, Zhu 1982, Huang 1988, Y.-H. Liu 1988, X.-N. Liu 1988, Shi 1990, Dai 1994, Sybesma 1997, and many others). Chao (1968) and Li & Thompson (1981) suggest that *-le* is a verbal suffix expressing perfectivity; however, such a view keeps being questioned due to examples like (38).

(38) Zhangsan xie-le yi-feng xin, danshi mei xie wan.
Zhangsan write-ASP one-CL letter but not write finish
'*Zhangsan wrote a letter, but he did have it finished.'

If the aspectual suffix *-le*, as Chao (1968) and Li & Thompson (1981) suggest, is a perfective aspect marker, they would expect (38) to be ungrammatical, contrary to fact. Besides, the claim that *-le* is a perfective aspect marker is further challenged by its compatibility with an adjective (or a stative verb in terms of Li & Thompson 1981), as illustrated by (39).

(39) Zhe-duo hua hong-le yi-dian-er.
This-CL flower red-ASP a-little-bit
'This flower is a little bit redder than before/the standard value of redness assumed by people for the flower.'

Due to space limitations, we shall not pay any further attention to reviewing previous literature on the aspectual suffix *-le* for the remainder of this paper; instead, we shall briefly introduce as preliminary Xunning Liu's (1988) insightful and convincing work on the semantic nature of *-le* (Also see Rohsenow 1978, Shi 1990).

Liu (1988) suggests that the aspectual suffix *-le* is better analyzed as a realization rather than a perfective aspect marker. As he argues, if *-le* is regarded as a perfective aspect marker, it will be difficult for us to explain the following phenomena: first, we would incorrectly predict that an entailment relation similar to that between (40a) and (40b) can be gotten from each of the following two pairs (i.e. (41a-b) and (42a-b)) by analogy.

(40) a. Chi-le fan qu.
Eat-ASP rice go
'We shall leave for some place after completing our meal.'
b. Chi-wan fan qu.
Eat-finish rice go
'We shall leave for some place after completing our meal.'

(41) a. Di-le tou zou.
Down-ASP head walk
'Someone walks with his head down.'
b. *Di-wan tou zou.
Down-finish head walk

(42) a. Zhe cai tongyi-le wo-de kanfa.
This then agree-ASP my idea
'So, (he) agrees with me.'
b. *Zhe cai tongyi-wan wo-de kanfa.
This then agree-finish my idea

Second, if examples like (41a-b)-(42a-b) are considered cases that need special treatment simply because of the idiosyncratic characteristics of verbs like *di* 'down' or *tongyi* 'agree', we would run into difficulty in explaining why (43a) and (44a) conflict with each other in the notion of 'perfectivity'.

(43) a. Chi-le jiu zou.
Eat-ASP then go
'We shall leave for some place after completing our meal.'
b. Rangrang-le yi-zhenzi jiu mei sheng le.
Shout-shout-ASP a-while then not sound SFP
'After shouting for a while, he gets silent.'
(44) a. Chi-le zheme chang shijian, hai zai chi.
Eat-ASP such long time still at eat
'After having been eating for such a long time, he still keeps eating.'
b. Rangrang-le kuai yi xiaoshi le, hai you wan mei wan.
Shout-shout-ASP quick one hour SFP even have finish not finish
'After having been shouting for an hour, you had better shot up.'

The same also obtains between (43b) and (44b).

Third, Xunning Liu (1988) points out that, in Contemporary Chinese, it is the V-*wan* 'V-finish' rather than the V-*le* construction that signals perfectivity. What the V-*le* construction denotes indeed is 'realization' (or initiation) of an action or a state, as illustrated by examples below.

(45) a. Chi-wan cai juede you dian-er xiangwei.
Eat-finish then feel have a-little-bit fragrant
'After finishing eating it, we come upon finding it delicious.'
b. Chi-le cai juede you dian-er xiangwei.
Eat-ASP then feel have a-little-bit fragrant
'When eating it, we come upon finding it delicious.'
(46) a. Jian-wan ta, hai zhen you dian-er haipa ne.
See-finish he even really have a-little-bit scare SFP
'After meeting with that person, we all feel a little bit scared.'

b. Jian-le ta, hai zhen you dian-er haipa ne.
See-ASP he even really have a-little-bit scare SFP
'We feel a little bit scared as we are meeting with that person.'

(45a) conveys that the state of deliciousness comes out as result of the implicit agent's thoroughly completing the eating event; that is, at the moment when the eating event is realized (or initiated), it (e.g. the meal) might not taste delicious. However, (45b) expresses that the implicit agent (i.e. the eater) comes with the sense of deliciousness as he starts or initiates the eating event. The same contrast also obtains between (46a) and (46b).

Fourth, if the V-*le* construction denotes completeness of an event process and has *meiyou* 'not' as its negative counterpart, *meiyou* 'not' would simply function to negate the 'completeness' conveyed by the V-*le* construction. However, the fact does not bear out this expectation, as the contrast below shows.

(47) a. chi-le fan lai de
eat-ASP rice come DE
'those who have eaten their meal completely and came'
b. mei chi fan lai de
not eat rice come DE
'those who did not have their meal but come'

(48) a. zuo-le zhunbei de
do-ASP preparation DE
'those who have prepared.'
b. mei zuo zhunbei de
not do preparation DE
'those who did not prepare'

What (47b) conveys is 'those who did not have their meal' but not 'those who did not have their meal completed thoroughly'. Likewise, a similar way of contrasting also obtains between (48a) and (48b).

Based on these empirical facts, Xunning Liu (1988) proposes that the aspectual suffix *-le* is a realization rather than a perfective aspect marker. Realizing of an action or a state, as Xunning Liu (1988) suggest, means that an action or a state is initiated, but does not guarantee the whole process of an action is completed. So, occurrence of the aspectual suffix *-le* in (49a-b) is under prediction.

(49) a. Zhangsan chi-le yi-tiao yu.
Zhangsan eat-ASP one-CL fish
'Zhangsan ate a fish.'
b. Zhangsan yang-le yi-tiao liyu.
Zhangsan raise-ASP one-CL carp
'Zhangsan is raising a carp.'

Namely, the aspectual suffix *-le* in (49a) not only indicates realization or inchoativity of a past event, but is also compatible with a present continuative interpretation in (49b).

4.2.2 The explicit individual exceed comparative analysis

As we have argued in §2, the Chinese X A-*le* D construction is a type of explicit exceed comparative involving the individual comparison. Since no overt individual-denoting compared object is found inside, we suggest the X A-*le* D explicit individual comparative, for example (50a), has a syntactic structure like (50b), in which the covert *exceeding* verb (i.e. *ex*) selects an AP as complement.

(50) a. Zhangsan gao-le san gongfen.
Zhangsan tall-ASP three centimeter
'Zhangsan is three centimeters taller than before/the standard value of human height assumed by people in the discourse.'
b. [Zhangsan [$_{AsP}$ … [$_{ExP}$ [[$_{Ex}$ [[$_{A}$ gao]$_i$-***ex***]-*le*] [$_{AP}$ *pro* [[$_{A}$ t$_i$] [$_{NP}$ san gongfen]]]]]]]

In the specifier position of the adjective phrase, there occurs a covert individual-denoting pronominal (i.e. *pro*), which functions as the compared object. The adjective *gao* 'tall', as (50b) shows, overtly raises to the Ex^0 position to form the inflected verb *gao-ex-le* 'tall-ex-ASP', which properly governs the individual-denoting compared object *pro*.[10] When the individual-denoting pronominal *pro* is interpreted as being coindexed with the subject NP *Zhangsan*, (50a) simply expresses that *Zhangsan* is taller than before, meaning that *Zhangsan's* height has changed and the differential between *Zhangsan's* current height and his previous height is *three centimeters*. This dynamic or achievement

[10] Following Chomsky (1995), we suggest that, in the numeration of (50a), the 'exceed' verb *-ex* is selected from the lexicon in its inflected form, namely *gao-ex-le* 'tall-ex-ASP', and the covert aspectual head in (50b), instead of dominating inflectional morphology, contains a bundle of formal features that need checking in the course of computation (or form a probe-goal relation with the verb *gao-ex-le* 'tall-ex-ASP' (cf. Chomsky 2001).

meaning actually can be considered the inchoativity of a past event (cf. Lü et al. 1980).[11] By contrast, when the covert individual-denoting pronominal *pro* is arbitrarily interpreted as someone other than the subject NP *Zhangsan*, it is not implausible for us to regard this *pro* as denoting a person whose height equals the standard height of human beings assumed by people in the discourse; therefore, (50a) conveys a stative present continuative interpretation, meaning that *Zhangsan is three centimeters taller than the standard value of human height assumed by people in the discourse*. Simply put, the ambiguity shown by the X A-*le* D explicit individual comparative indeed results from the chameleon-like nature shown by the reference of the covert individual-denoting pronominal *pro*. So, the content of the individual-denoting pronominal *pro* plays a key role in determining the interpretation of the whole construction.

According to Rizzi (1986:520), recovery of the content of *pro* is subject to a condition as in (51).

(51) Let X be the licensing head of an occurrence of *pro*; then *pro* has the grammatical specification of the features on X coindexed with it.

As we just pointed out, it is that the chameleon-like nature shown by the reference of the covert individual-denoting pronominal *pro* that makes the X A-*le* D explicit individual exceed comparative ambiguous between the meaning about the inchoativity of a past event and one about a present continuative interpretation. If Rizzi's (1986) theory of *pro* is correct, we would expect the licensing head of the individual-denoting pronominal *pro* in the X A-*le* D explicit individual exceed comparative (i.e. the inflected verb *gao-ex-le* 'tall-ex-ASP') to be associated with the grammatical specification of the features about the inchoativity of a past event and a present continuative interpretation. The semantic content of the aspectual suffix *-le* makes it qualified to be such an element, as (49a-b) repeated as (52a-b) show.

(52) a. Zhangsan chi-le yi-tiao yu.
Zhangsan eat-ASP one-CL fish
'Zhangsan ate a fish.'

[11] So, we would expect example (i) to be grammatical, and the fact bears out this expectation (cf. Lin 2004).

(i) Zhangsan zai yi-nian nei gao-le shi gongfen.
Zhangsan in one-year within tall-ASP ten centimeter
'Zhangsan grew ten centimeters in one year.'

b. Zhangsan yang-le yi-tiao liyu.
Zhangsan raise-ASP one-CL carp
'Zhangsan is raising a carp.'

The aspectual suffix *-le* in (52a) indicates realization of an action or inchoativity of a past event, but is also compatible with a present continuative interpretation in (52b). Since the inflected 'exceed' verb *gao-ex-le* 'tall-ex-ASP' in (50b) properly governs and licenses the individual-denoting pronominal *pro*, the individual-denoting *pro* has coindexed with the inflected verb the grammatical specification of the features about the inchoativity of a past event and a present continuative interpretation'.[12] Put another way, the aspectual suffix *-le* functions as a licensing head to help recover the content of the individual-denoting pronominal *pro*, and provides a possibility for the X A-*le* D explicit individual exceed comparative to be interpreted in more than one way if no contradiction between this possibility and other elements of the construction exists. Thus, the aspectual suffix *-le* in the X A-*le* D exceed explicit comparative can be considered a marker not only to properly govern and license the individual-denoting pronominal *pro*, but also to distinguish two types of explicit individual exceed comparatives in Chinese: one (i.e. the X A (Y) D explicit individual exceed comparative) has an overt definite individual-denoting NP, for example *Lisi*, as the compared object while the other (i.e. the X A-*le* D explicit individual exceed comparative) has the covert individual-denoting pronominal *pro* as the compared object.

Since the X A-*le* D exceed comparative is a type of explicit comparatives, occurrence of the *pos* morpheme, which implies the implicit comparison, is not allowed. Moreover, the individual-denoting compared object *pro* is not a degree term; the measure phrase in the X A-*le* D explicit individual comparative, therefore, becomes the only possible element that can bind (or saturate) the degree argument of the adjective indirectly by restricting the degree argument that represents the difference between the compared objects (cf Hellan 1981, von Stechow 1984).

5. Empirical and theoretical consequences

Our analysis has the following empirical and theoretical consequences. First, we would expect that an X A-*le* D construction with a subject NP that does not have the ability of changing along the scale associated with the adjective involved can only get a stative reading, and this expectation in fact is borne out by (53a), which has a syntactic

[12] This idea is similar to Cheng's (1988:10) Aspect licensing analysis to *pro* drop in Chinese: *pro* is governed by Aspect.

representation like (53b).

(53) a. Zhe-shuang xiezi da-le yi hao.
This-pair shoes big-ASP one number
'This pair of shoes is one number larger than the standard size assumed by people in the discourse.'

b. [Zhe-shuang xiezi … [$_{ExP}$ [[$_{Ex}$ [[$_{A}$ da]$_{i}$-***ex***]-*le*] [$_{AP}$ *pro* [[$_{A}$ t$_{i}$] [$_{NP}$ yi hao]]]]]]
This-pair shoe big-ASP one number

Since a pair of shoes cannot have itself change along the size-scale, (53a), according to our analysis, has a syntactic structure like (53b), in which individual-denoting pronominal *pro* can only be arbitrarily interpreted as one whose height equals to the default standard height of human beings assumed by people in the discourse. Hence, (53a) is not ambiguous.

Second, due to examples like (54a-b), Lillian M. Huang (1988:193-194), without distinguishing the verbal suffix *-le* from the sentence final *le*, suggests that the aspect marker *le* is a boundary marker.

(54) a. Lisi gao-le san cun.
Lisi tall-ASP three inch
'Lisi is three inches taller than before/the standard value of human height assumed by people in the discourse.'

b. Zhe-shuang xiezi xiao-le yi-dian-er, wo yao qi hao.
This-CL shoe small-ASP a-little-bit I want seven number
'This pair of shoes is a little bit smaller than my size; I want size seven.'

However, we would say that the notion of *boundary* suggested by Huang (1988) in fact is the default standard value of comparison indirectly provided by the individual-denoting pronominal *pro* inside. Hence, unlike Huang (1988), we shall not say that in (55a) the state denoted by the adjective *gao* 'tall' is bounded.

6. Concluding remarks

There are two types of explicit individual exceed comparatives in Chinese: the X A-*le* D and the X A (Y) D explicit individual exceed comparatives. The former contains a covert individual-denoting pronominal *pro* as the compared object. The referential interpretation of this compared object is chameleon-like, which causes some cases of the X A-*le* D explicit individual exceed comparative to be ambiguous between the

stative and the dynamic meaning. The aspectual suffix *-le* is the marker not only to license the individual-denoting compared object *pro*, but also to distinguish two types of explicit individual exceed comparatives in Chinese. The measure phrase inside is the only possible degree term that can bind the degree argument of the adjective by restricting the degree argument that represents the difference between the compared objects; therefore, the differential measure phrase cannot be deleted.

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漢語顯性個體比較結構中的變色龍成分

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漢語的「X A-了 D」結構是一種顯性的個體比較結構，當中的隱性個體比較項 *pro* 必須受到動貌標記「-了」的認可。這個個體比較項有著如變色龍般的指涉特性，這個特性使得「X A-了 D」結構顯現出岐義的現象。因爲個體比較項 *pro* 並不是一個程度詞組，句中形容詞的程度論元僅能藉由句中表差值的數量詞組來加以滿足和限制，也因此表差值的數量詞組不能被刪略。

關鍵詞：顯性個體比較結構，-了，認可，個體比較項 *pro*，程度論元，差值數量詞組