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Workshop: "The profile of event delimitation"

## **DELIMITING EVENTS IN MANDARIN: The case of reduplication**

Bianca BASCIANO – Università Ca' Foscari Venezia

Chiara MELLONI – Università di Verona

# REDUPLICATION OF VERBS IN MANDARIN CHINESE

- Reduplication is very productive in Mandarin and is found across lexical categories (N, V, Adj). The verbal domain displays a very productive pattern of reduplication.

**DIMINISHING Reduplication:** 'delimitative' aspect (Chao 1968; Li and Thompson 1981; Tsao 2004).

Structure	Function	Base	Reduplication
[A] ( <i>yi</i> 'one') [A]	diminishing	看 <i>kàn</i> 'look'	看(一)看 <i>kàn (yi) kàn</i> 'have a look'
[AB][AB]		休息 <i>xiūxi</i> 'rest'	休息休息 <i>xiūxi xiūxi</i> 'rest a little/for a while'

# FORMAL PROPERTIES

## STRUCTURAL PATTERN

**DR is NOT a syntactic atom:**

- 一 *yī* 'one' (numeral)
- 了 *le* perfective marker

can occur between base and reduplicant:

**A + 一 *yi* + A**

- 1) 走 (一) 走 *zǒu (yi) zou* 'have a walk'

**A + 了 *le* + A**

- 2) 走 (了) 走 *zǒu (le) zou* 'walked for a while'

# ASPECTUAL PROPERTIES

DR modifies the *Aktionsart* of the verb: it turns an unbounded dynamic event into a **temporally bounded** event.

(see Xiao & McEnery 2004)

Aspectual constraints on the base verb and on the aspectual properties of the sentences in which DR occurs?

Let's look at the




aspectual properties of the base verbs



interplay between DR and OUTER/viewpoint aspect

# ASPECTUAL PROPERTIES OF THE BASE VERB

BASE VERB  [+dynamic], [+durative], ([+controlled])  
CANNOT BE a (inherently) TELIC verb:  
only atelic / unbounded processes  
(see Arcodia, Basciano & Melloni 2014; 2015)

- **Statives** generally cannot reduplicate (see Tsao 2001).
- **Achievements** cannot be reduplicated (Xiao & McEnery 2004:155):
  - 1) \*赢赢那场比赛 *yíng yíng nà chǎng bǐsài* ‘win that match a bit’  
win win that CLF match
- **Accomplishments** normally cannot be reduplicated (Xiao & McEnery 2004:155):
  - 2) \*写写两封信 *xiě xiě liǎng fēng xìn* ‘write **two letters** a bit’  
write write two CLF letter
- **Resultative compounds** cannot be reduplicated (Tsao 2001):
  - 3) a. \*看完看完 *kàn-wán kàn-wán* ‘read-finish read-finish’  
b. \*喝醉喝醉 *hē-zuì hē-zuì* ‘drink-drunk drink-drunk’

# ASPECTUAL PROPERTIES OF THE SENTENCE

DR is NOT compatible with situations expressing *actions in progress*:

- Incompatible with the **progressive** aspect marker 正在 *zhèngzài*

1) \*她正在看看电视

tā *zhèngzài* kàn kan diànshì

she **PROGR** watch watch TV

'She is watching TV a little'

(Ding 2010:275)

- Incompatible with the durative aspect marker 着 *zhe*

2) \*学生们很有兴趣地参观参观着展览。

xuéshēng-men hěn yǒu-xìngqu-de cānguān-cānguān *zhe* zhǎnlǎn

student-PL very have-interest-ADV visit-visit **DUR** exhibition

'Students are visiting the exhibition with a great interest'

(Ding 2010:275)

# ASPECTUAL PROPERTIES OF THE SENTENCE

- DR is compatible with the perfective aspect marker 了 *le* (complete or terminated action, see Smith 1991, Xiao & McEnery 2004).

- 1) 打扫了打扫 *dǎsǎo le dǎsǎo* 'sweep PFV sweep'
- 2) 学习了学习 *xuéxí le xuéxí* 'study PFV study'

## BUT... EXCEPTIONAL DISTRIBUTION!

→ 了 *le* is placed in between the base and the reduplicant

→ It does NOT occur after the V complex contrary to resultatives and other kinds of compound verbs:

- 3) a. 看完了 *kàn-wán le* 'read-finish PFV' \*看了完 *kàn le wán*  
b. 喝醉了 *hē-zuì le* 'drink-drunken PFV' \*喝了醉 *hē le zuì*

Analysis





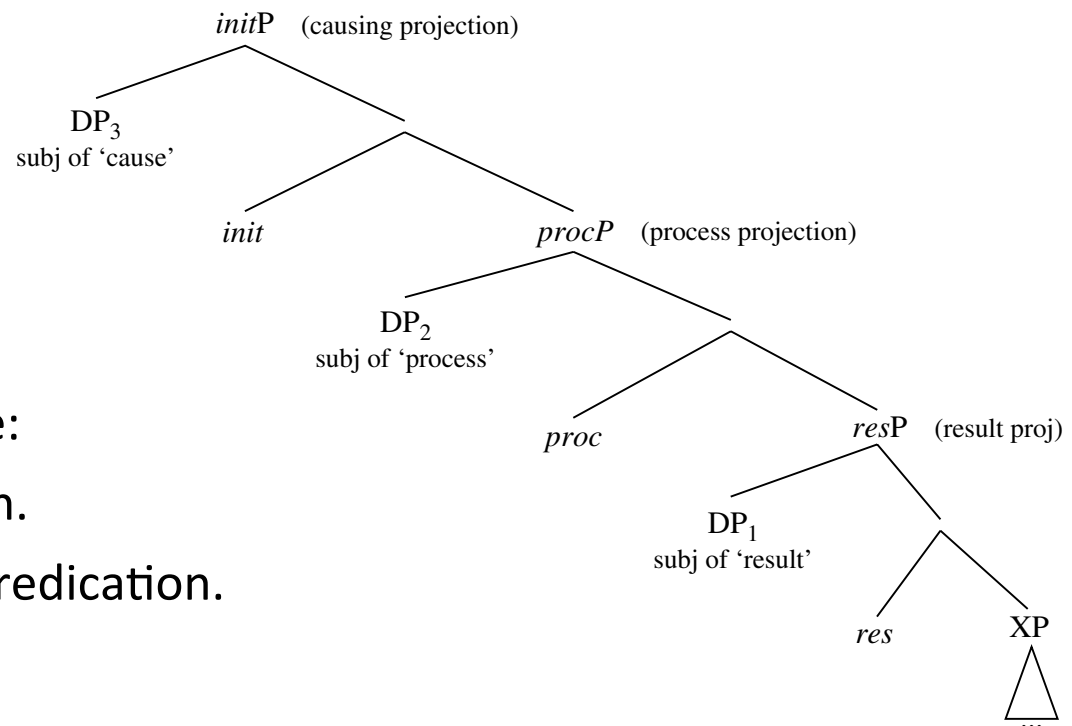
# DR IS NOT “MORPHOLOGY”

## **DIMINISHING reduplication is a syntactic phenomenon:**

1. the separability of the complex, which challenges the alleged syntactic atomicity or lexical integrity of words (see Lapointe 1979, *inter alios*);
  2. aspectual constraints on the base verb, on the grounds that aspectual properties are *syntactically* encoded.
- Since the early 1990s, a number of studies have advanced the hypothesis that thematic and aspectual requirements of events are directly encoded in the syntax (Travis 1991, 2000, 2010; Borer 1994, 1998, 2005; McClure 1995; **Ramchand** 1997, **2008**; among others).

# RAMCHAND'S FIRST-PHASE SYNTAX

Three subevents hierachically ordered by means of embedding causal relations



As in H&K (1993),  
every projection contains  
a core predicational structure:  
Compl: content of predication.  
Spec: “Subj” or “Theme” of predication.

# RAMCHAND'S FIRST-PHASE SYNTAX

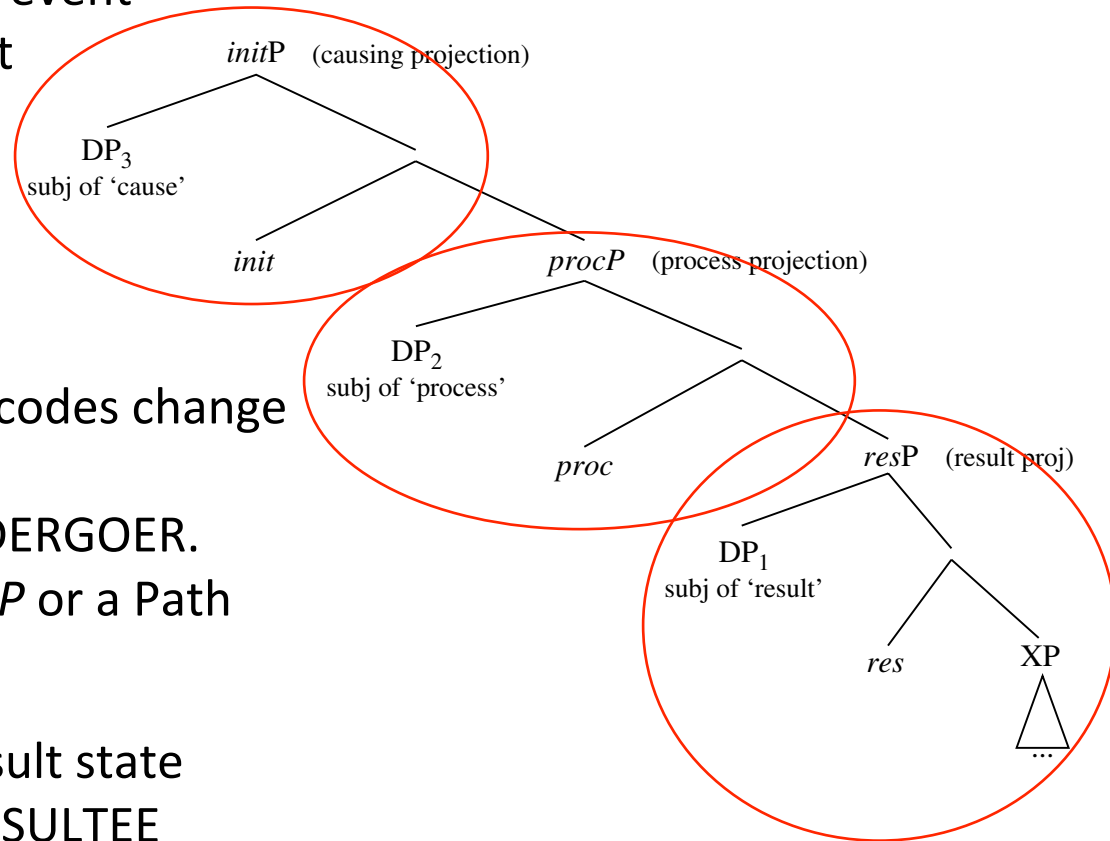
**initP** introduces the causation event and licenses the ext. argument = the subject of cause.

**Initiators** can be Actors or Causes

**procP** represents the core of a **dynamic** event (it encodes change through time).

The subj of process is the UNDERGOER. The complement might be *resP* or a Path (incremental Theme)

**resP** provides the telos or Result state  
The subject of result is the RESULTEE



# RAMCHAND'S FIRST-PHASE SYNTAX

Each lexical item specifies the syntactic relevant information (category label or 'tag') which permits its insertion in the eventive structure.

Eng.: *push* [init, proc], *throw* [init, proc, res]

## Telicity:

1. lexical item with [res] feature
2. **spatial bounded path** (incremental theme) in the complement position of procP.

"The complement position of a process head is associated with the semantic relation of structural homomorphism, regardless of the category of that complement." (Ramchand 2008: 47)

# REDUPLICANT AS A [+BOUNDED] PATH

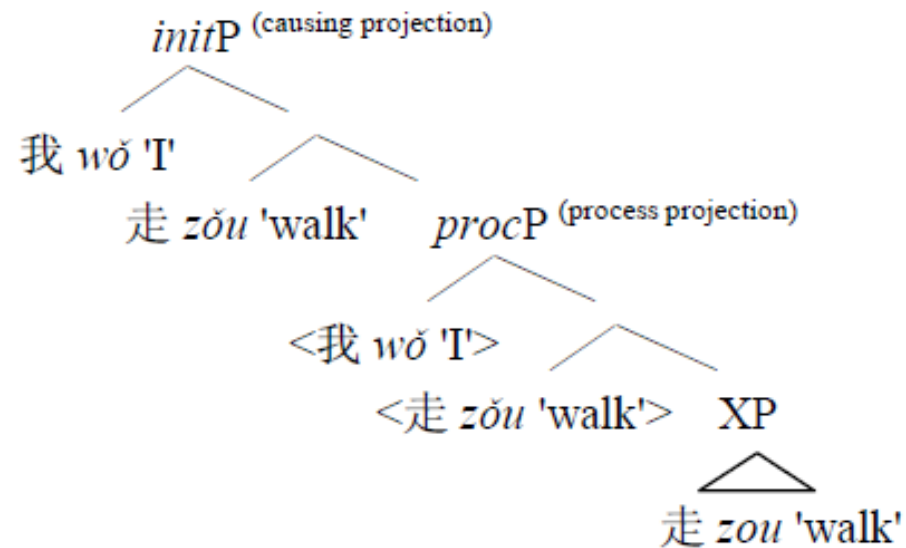
Main claims:

- Chinese verbs that can undergo diminishing reduplication: [init, proc]
- The reduplicant adds a [+bounded] temporal path to the [-bounded] situation codified by the base verb.
- The reduplicant occupies a dedicated syntactic position in the complex structure of vP, i.e., it is the complement of the Process head in Ramchand's (2008) framework.

# REDUPLICANT AS A [+BOUNDED] PATH

In the case of an intransitive verb 走 *zǒu* 'walk':

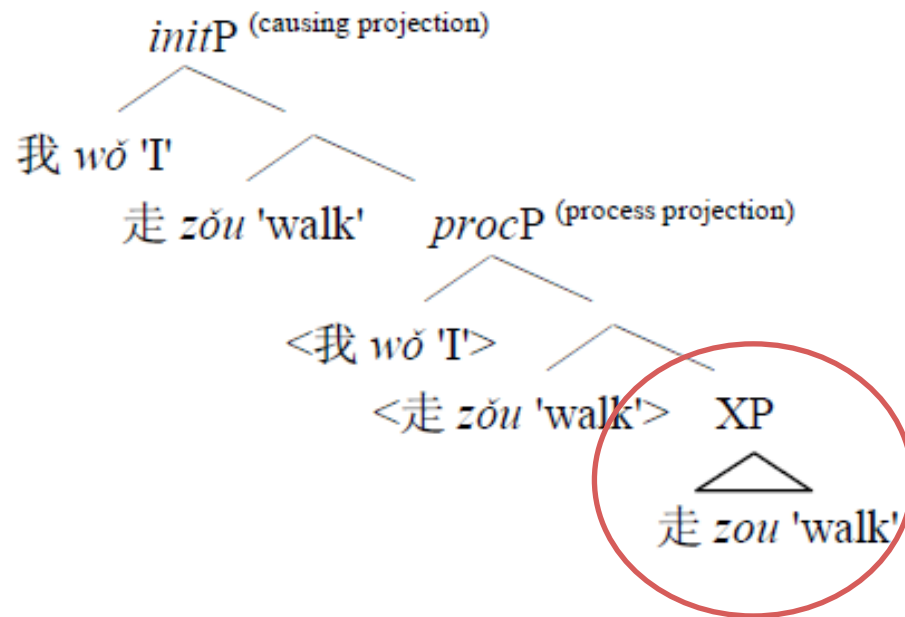
1) 走走 *zǒu zou* 'walk walk = have a walk/walk a little' (走 *zǒu* 'walk' [init, proc])



# REDUPLICANT AS A [+BOUNDED] PATH

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# Reduplication and Objects





# TRANSITIVE VERBS WITH AN UNDERGOER OBJECT

In Ramchand's framework, 'objects' of the verb can originate in different places in the *vP*. Within the *process* Projection, they can be

→ Undergoers = specifiers of *procP*

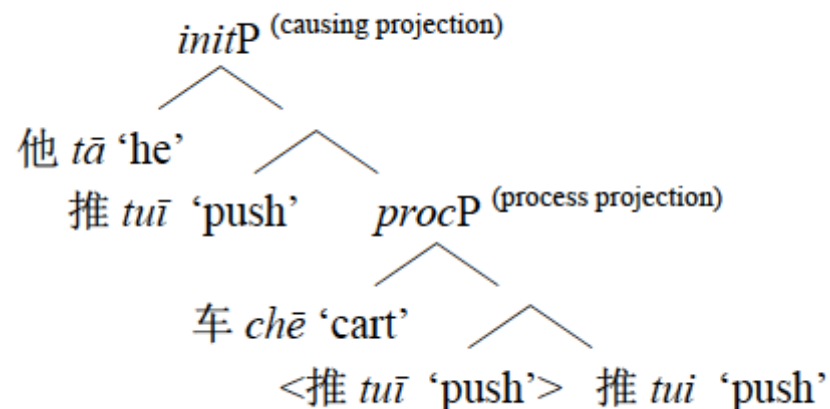
→ Paths = complements of *procP*

Remind the claim: The reduplicant is the abstract Path that sits in the complement of *procP* → no incompatibility arises in those cases where the object sits in the specifier of *procP* (Undergoer).

1) a. 他推推车    *tā tuī-tui*    *chē* 'He pushes the cart a bit'

he push-push cart

b.



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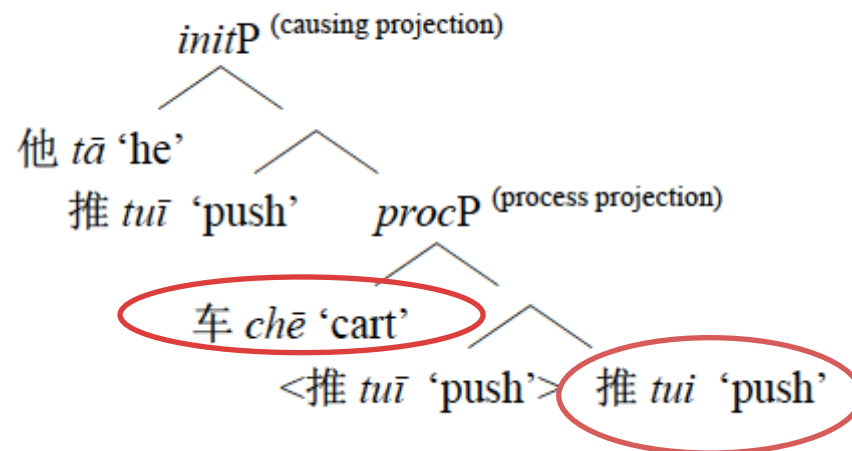
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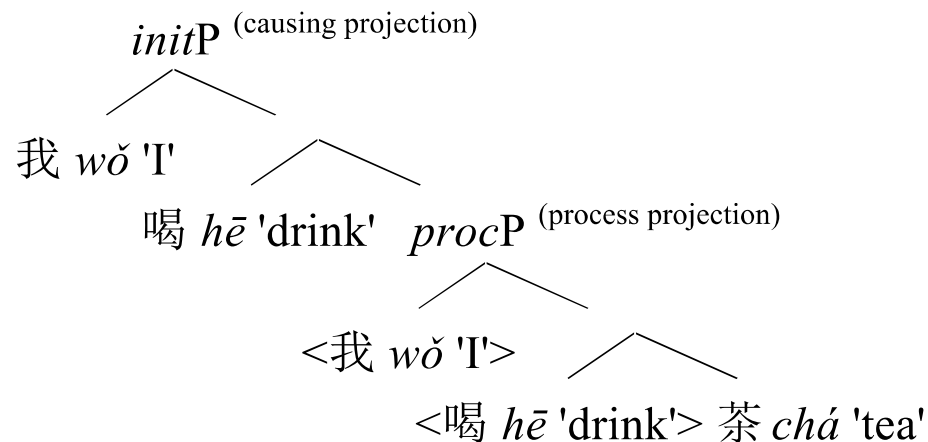


# TRANSITIVE VERBS WITH A PATH OBJECT

This class includes creation/consumption (or ingestive) verbs, like *eat*, *drink*, *read*, *write*, etc. Ramchand (2008) assumes that the specifier position of *procP* is not filled by the direct object of the verb (which is a Path), and that it is **the Initiator itself which fills the Undergoer position** as well, given its status as continuous experiencer of the process.

2) a. 我喝茶。 *wǒ hē chá* 'I drink tea'

b.



# TRANSITIVE VERBS WITH A *PATH* OBJECT

What's the base position of the reduplicant in the case of an 'ingestive' verb undergoing DR?

1) 喝喝茶 *hē-he chá* 'drink-drink tea'

Assuming that the object is a Path in the complement position of *procP*, we should exclude the possibility that the reduplicant is a Path itself, since the Path position is already occupied by the object.

# TRANSITIVE VERBS WITH A PATH OBJECT

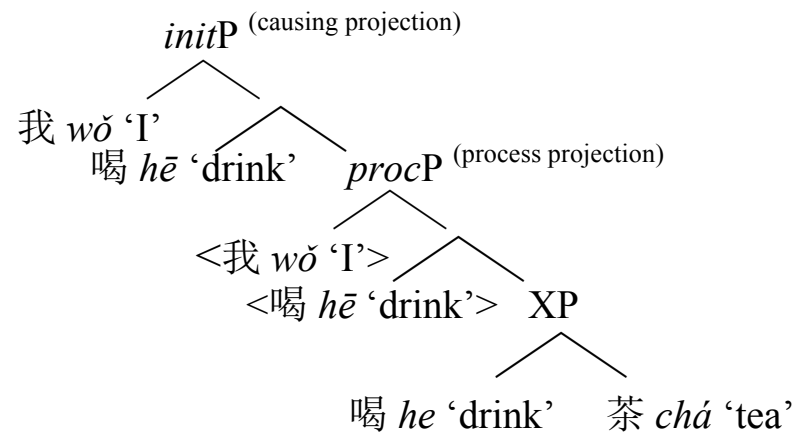
However... DR with Incremental Themes is close to

1)           It. *fare* (\**bere*) *una bevuta di tè* / Eng. *take a drink of tea*

where *una bevuta (di...)* / *a drink (of...)* act as measure phrases, providing a “boundary” to the activity verb *bere/drink*.

Structurally, just as *di tè / of tea* acts as the complement of *bevuta / drink*, in Chinese *chá* ‘tea’ would be the complement of *hē* ‘drink’.

2)





# WHAT'S THE 'ROLE' OF THE REDUPLICANT?

Distributionally too, the reduplicant resembles the (heterogeneous) category of (verbal) classifiers:

- it closely follows the verb root
- it can be preceded by a numeral (— *yī* 'one' )
- it can be followed by a noun, i.e. the verb object

## THIS ANALYSIS....

- ❑ provides a straightforward explanation for the delimiting/diminishing semantics of this pattern;
- ❑ accounts for the lack of lexical integrity of the complex, since, as a phenomenon affecting the “first phase syntax” of the verb, DR is not expected to create syntactic atoms;
- ❑ structurally accounts for the incompatibility between DR and Result State: result state and reduplicant cannot be base-generated in the same structural position;
- ❑ predicts the semantics of direct objects of reduplicated verbs, which never are Paths/Incremental Themes: they can be Undergoers (in spec, ProcP) or can be complements of the reduplicant itself.



# Reduplication and Verbal Classifiers



# REDUPLICATION AND VERBAL CLASSIFIERS (VCLs)

- Chao (1968) and Li & Thompson (1980) consider verbal reduplication and constructions taking verbal classifiers as almost equivalent.
- Paris (2013) argues that they do not function alike, neither syntactically nor semantically.
- Actually, not all VCLs are event delimiters:
  - Some VCLs are compatible with all verb classes and are able to modify telic verbs too (see Paris 2013, Donazzan 2012, Zhang 2016).

# REDUPLICATION AND VERBAL CLASSIFIERS

Paris (2013): VCLs are a mixed class

- **Strong** classifiers are markers of frequency (telic verbs too are admitted):

- 1) 去过北京三次  
*qù guo Běijīng sān cì*  
go ASP Beijing three VCL  
'to have been three times to Beijing'

# REDUPLICATION AND VERBAL CLASSIFIERS

Paris (2013): VCLs are a mixed class

- **Weak** classifiers bound the (durative) predicate by delimiting a sub-interval, like 下 *xià*.

2) 等客人一下 *děng kèren yī xià* 'to wait the guests a bit'  
wait guest one VCL

This aspectual modification is proven by the fact that the whole construction V-VCL, differently from the base verb alone (activity), is incompatible with the durative and the progressive aspect marker (see also Zhang 2016), along the same lines of reduplication.

# REDUPLICATION AND VERBAL CLASSIFIERS

Moreover, contrary to strong ones, **weak VCLs can only be preceded by *yī* ‘one’**, which is a ‘weak’ number, indicating ‘small quantity’ (see e.g. Li 2002), and it is rather interpreted as an indefinite marker.

- **Like reduplicants in verbal reduplication (only with monosyllabic bases).**

Li (2002): process of *bleaching* from VCLs preceded by a ‘real’ number (strong VCLs) to VCLs preceded by a ‘weak’ number (weak VCLs)

# REDUPLICATION AND VERBAL CLASSIFIERS

Paris (2013) highlights the main differences between verb reduplication and VCLs, in particular:

i. morphological difference: VCLs are free forms, while **the reduplicant** in verbal reduplication is a **bound form**.

- 1) a. 我等了**他**一下  
wǒ děng le **tā** yī xià  
I wait PFV he one VCL  
'I waited him for a while'
- b. \*我等了**他** (一) 等  
wǒ děng le **tā** (yī) děng  
I wait PFV he (one) wait

Cf.

- 2) 我等了 (一) 等**他**  
wǒ děng le (yī) děng **tā**  
I wait PFV (one) wait he  
'I waited him for a while'

➤ But note that considering the reduplicant as a bound form does not explain the position of the perfective marker 了 *le* in between.

# REDUPLICATION AND VERBAL CLASSIFIERS

Diachronic perspective: since the Yuan period (1271-1368), objects could precede or follow the reduplicant. Those preceding the reduplicant generally were personal pronouns or proper nouns (reminiscent of VCL constructions):

1) 你看这厮, 我推了他一推便死了, 我不信。

*nǐ kàn zhè sī, wǒ tuī le tā yì tuī biàn sǐ le,*  
you look this male.servant I pull PFV he one pull then die PFV  
*wǒ bù xìn*  
I not believe

‘Look at this servant, I just pull him a bit and he died. I do not believe it.’

(元曲选 *Yuán qǔ xuǎn*, in Tang 2001: 36).

# REDUPLICATION AND VERBAL CLASSIFIERS

Paris (2013):

ii. In verbal reduplication the reduplicant is either put immediately after the base or preceded by the numeral — *yī* ‘one’. VCLs, on the other hand, must be preceded by a numeral and this numeral is not limited to *yī* ‘one’.

**BUT:**

- The fact that the number is NOT limited to ‘one’ is true only for STRONG classifiers.
- If the object is a monosyllabic personal pronoun, with WEAK VCLs the number — *yī* may be omitted (Li 2002: 3):

1) 打他下儿 *dǎ tā xiàr* ‘beat him VCL’

- Omission is possible also with other kind of VCLs (趟 *tàng*、回 *huí*、阵 *zhèn*、顿 *dùn*):

2) 去趟广州 *qù tàng Guǎngzhōu* ‘go VCL Canton’



# REDUPLICATION AND VERBAL CLASSIFIERS

Also, at the time when verbal delimiting reduplication first appeared (Song dynasty, 960-1279), the reduplicant could be preceded by numerals other than 一 *yī* 'one':

1) 吹师耳两吹。

*chuī shī ěr liǎng chuī*

blow master ear two blow

'(he) blew twice in the master's ears'

(景德傳燈錄 *Jǐngdé Chuándēnglù*, chapter 6, in Pan 2008: 69)

# REDUPLICATION AND VERBAL CLASSIFIERS

These may be considered as **VCL constructions**, where the verb is ‘borrowed’ as VCL.

Actually, VCLs ‘borrowed’ from verbs are found in the history of the language. Pan (2008) observes that these VCLs appeared during the Five dynasties period (907-960):

1) 师抬起手, 打两掴。(祖堂集 *Zǔ táng jí*, ch. 12, in Zhang 2000: 10)

<i>shī</i>	<i>tái-qǐ</i>	<i>shǒu</i> ,	<i>dǎ</i>	<i>liǎng</i>	<i>guāi</i>
master	lift-raise	hand	strike	two	slap

‘The master raised his hand and slapped (him) twice.’

See also Modern Chinese 吓了一跳 *xià le yī tiào* ‘frighten PFV one jump’, where the verb 跳 *tiào* acts as VCL

# FROM VCL CONSTRUCTIONS TO VERBAL REDUPLICATION

Zhang (2000) and Pan (2008): during the Song (960-1279) period a V-yi-V pattern emerged, where 一 yī does not represent any longer a fix quantity, but has a bleached meaning.

1) .....故且将去吓他一吓。

*gù qiě jiāng qù xià tā yī xià*  
thus and FUT go frighten he one frighten

‘...and thus he will go and frighten him a bit.’

(朱子语类 *Zhū zǐ yǔ lèi*, 1270 AD, ch. 134, in Pan 2008: 69)

- Meaning: few occurrences, short duration, light degree or relaxed tone.

# FROM VCL CONSTRUCTIONS TO VERBAL REDUPLICATION

- This process of bleaching from VCL constructions with a VCL ‘borrowed’ from a verb to the verbal reduplication pattern V-yi-V seems to be very close to the process of bleaching which led from strong classifiers to weak classifiers (see Li 2002):

From strong to weak classifiers

V+ (real) Num + VCL → V + yī ‘one’ (weak) + VCL

From VCL constructions to verbal reduplication

V+ (real) Num + V (VCL) → V + yi ‘one’ (weak) + V

- It has been argued, indeed, that verbal reduplication developed from VCL constructions (e.g. Zhang 2000, Li 2002, Pan 2008).
- These facts not only contribute to highlight the close link between weak classifier constructions and verbal reduplication, but also support the hypothesis that the reduplicant in verbal reduplication has classifier-like features.

# REDUPLICATION AND VERBAL CLASSIFIERS

## WEAK CLASSIFIERS (// WITH REDUPLICANTS)

### ❑ SEMANTICALLY:

- are only compatible with activity (atelic) verbs;
- modify the aspectual/temporal constitution of the event, as reduplicants do.

### ❑ STRUCTURALLY:

- typically preceded by a weak numeral, — yī ‘one’, which may be omitted if the object is a monosyllabic personal pronoun (Li 2002: 3);
- are never introduced by a P, in contrast with typical adverbials;

### ❑ DISTRIBUTIONALLY:

- are always PostVerbal, in contrast with manner, location and other time adverbials that can only precede the verb.

# REDUPLICATION AND VERBAL CLASSIFIERS

Crucially, VCLs and DR are in complementary distribution:

1) \*看看一下      *kàn kan yī xià*  
look look one VCL

- Hypothesis: the reduplicant occupies the same structural position as a weak verbal classifier (in the sense of Paris 2013)
- (Weak) VCLs and Reduplicants are complements of the Verb, or *procP* in Ramchand's framework.

# CONCLUDING REMARKS

- Verbal diminishing reduplication in Mandarin is an event delimiting strategy: our analysis of the reduplicant as the complement of *procP* offers a fresh structural account for the semantics of DR, and for the aspectual and distributional constraints characterizing this pattern.
- As for the categorial status of the reduplicant, we argued that the reduplicant has classifier-like features.
  - Both synchronic and diachronic evidence argues in favor of a tight relation between VCL constructions and DR.
- Many issues deserve a deeper analysis, especially concerning the alleged word-like status of reduplicated verbs. This appears to be the main fact setting apart DR and VCL constructions.

謝謝 *xièxie!*  
**Thank you!**  
**Grazie!**

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