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#### The serial verb construction in Chinese: A tenacious myth and a Gordian knot<sup>1</sup>

WALTRAUD PAUL

#### Abstract

The term "construction" is not a label to be assigned randomly, but presupposes a structural analysis with an associated set of syntactic and semantic properties. Based on this premise, the term "serial verb construction" (SVC) as currently used in Chinese linguistics will be shown to simply refer to any multiverb surface string i.e., to subsume different constructions. The synchronic consequence of this situation is that SVCs in Chinese linguistics are not commensurate with SVCs in, e.g., Niger-Congo languages, whence the futility at this stage to search for a "serialization parameter" deriving the differences between so-called "serializing" and "non-serializing" languages. On the diachronic side, SVCs are invoked as a privileged site for verb-to-preposition reanalysis, but it is left open what structure is referred to under this label. A precise structural analysis of both the input and the output structure is, however, indispensable in order to make meaningful statements about language change.

#### 1. Introduction

The basic assumption serving as the starting point of the present article is that the term *construction* is not a label to be assigned randomly. Instead, to talk of

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<sup>1.</sup> This article is a substantially revised and extended version of work presented under the same or a similar title on different occasions in Gent, Paris, and Oxford over the past few years. I thank the audiences for feedback. I am especially indebted to two anonymous TLR reviewers for their insightful comments and suggestions which helped to improve both the content and the form of the article. I am equally grateful to Huba Bartos for his perseverance and patience as editor of this special issue. Last, but not least my thanks go to John Whitman who was exposed to the very first version of this article and whose critical remarks saved the future readers from getting lost in my meanderings through the conceptual labyrinth of SVCs.

a *construction* implies that a precise structural analysis is available and that the syntactic and semantic properties associated with the structure at hand have been established. If these requirements are not met, it is futile to identify a given surface string as a "construction" X, nor is it meaningful to compare this "construction" X across languages, the *tertium comparationis* not being guaranteed. The far-reaching consequences of such a loose application of the term "construction" will be illustrated by examining in detail the term *serial verb "construction"* as it is currently employed in Chinese linguistics.

I will demonstrate that in Chinese linguistics the term *serial verb "construction"* (SVC) simply refers to any surface string with more than one verb, i.e., it subsumes a multitude of different constructions in the sense outlined above. Accordingly, the bi-unique relationship between term and concept as required in any technical terminology is not given here, although this is the very basis for communication within a specialized field.

Similarly, in African linguistics (Niger-Congo languages), the term SVC also denotes a variety of different constructions, notwithstanding the consensus that a SVC is not a coordinate structure, that it denotes a single (composite) event and presents one clausal domain.

This state of affairs has two important consequences, both for synchronic and for diachronic studies. The synchronic consequence is that SVCs in Chinese linguistics are *not* commensurate with, e.g., SVCs in Niger-Congo languages, hence it is futile at the present stage to undertake typological studies aiming to derive the differences between so-called "serializing" and "non-serializing" languages in terms of a "serialization parameter". On the diachronic side, SVCs are invoked as a privileged site for numerous grammaticalization phenomena, but it is left completely open what structure is referred to under this label. In order to make meaningful statements about language change, however, it is indispensable to have a precise structural analysis of both the input and the output structure.

The article is organized as follows. Taking the different "definitions" of SVC proposed by Li and Thompson (1981, 1974, 1973) as representative of the current practice in the field, Section 2 carefully examines them one by one and argues that in Chinese linguistics "SVC" has served as a cover term for distinct constructions with different properties; it does *not* refer to a unique construction with a predictable set of formal properties. Section 3 compares the situation in Chinese linguistics with that in Niger-Congo languages and concludes that there is hardly any overlap between the phenomena labeled SVC in each language (family). Section 4 discusses the crucial role assigned to SVC in both diachronic and typological studies. It demonstrates that the term SVC in diachronic syntax likewise serves as a cover term for any multi-verb sequence. Last, but not least, it illustrates how the indeterminacy of the term SVC may lead to an incorrect analysis of a language particular phenomenon as well as

to wrong crosslinguistic generalizations. Given this state of affairs where no precise content is associated with the term SVC, the conclusion in Section 5 suggests a radical solution, i.e., to abandon the term SVC in its current usage in Chinese linguistics.

## 2. The SVC and its "definitions" in Chinese linguistics: Li and Thompson (1981, 1974, 1973)

It is important to note at the outset that I do not intend to give an overwiew of the abundant literature on SVCs here, nor do I claim to even attempt to do justice to the different conceptions of SVC present in the literature.<sup>2</sup> Instead, I want to concentrate on the situation within Chinese linguistics where a large variety of completely different phenomena is subsumed under the unique label SVC. For expository purposes, I have chosen Li and Thompson's view of SVC as representative for the current practice in the field. Not only has their work been quite influential in Chinese linguistics and beyond, but at the same time it offers the advantage to be very explicit about the coverage of the term SVC. It thus allows us to address the issue in a way which has the advantage of being accessible to non-sinologists and of being more systematic than a collection of all the phenomena labeled SVC by different authors in the Chinese literature (cf. Li, Linding 1986: Ch. 14; Lü, Shuxiang 2000: 36ff.; Zhu, Dexi 1982: Ch. 12, inter alia). Importantly, taken together these views lead to as large a coverage of the term SVC as that defended in Li and Thompson.

In the following, I will first present Li and Thompson's point of view and then subject to a detailed scrutiny each of the phenomena claimed to instantiate an SVC. This at first sight tedious procedure is indispensable, because the failure in Chinese linguistics to systematically take stock of the entire range of phenomena labelled SVC, to provide an analysis for each phenomenon, and to evaluate the overall consequences resulting from the passepartout nature of the term SVC constitutes the main reason why its problematic character – if not its total uselessness – has largely gone unnoticed, also in formally oriented studies (cf. Section 2.3 below).

#### 2.1. Li and Thompson (1981)

We will use the term serial verb construction to refer to a sentence that contains two or more verb phrases or clauses juxtaposed without any marker indicating

For comprehensive overviews within different frameworks, cf. Muysken and Veenstra (2006); Aikhenvald and Dixon (2006); Baker and Stewart (2002); Stewart (2001); Déchaine (1993); Lefebvre (1991); Bisang (1992), inter alia.

what their relationship is between them. What this means is that in Mandarin there are many sentences that all have the same form, namely [...] (NP) V (NP) (NP) V (NP) but that convey different types of messages because of the meanings of the verbs involved and the relationships that are understood to hold between them. That is, the property they all share is that the verb phrases in the serial verb construction always refer to events or states of affairs which are understood to be related as *parts* of *one* overall event or state of affairs. The exact way in which they are related varies according to the meanings of the verbs in these verb phrases. (Li and Thompson 1981: 594).

Li and Thompson (1981) propose to distinguish four different types of SVC:

*1st type:* The SVC expresses "two or more *separate* events" (Li and Thompson 1981: 595; emphasis mine) and "may be understood to be related in one or more of the following four ways": (i) consecutive, (ii) purpose, (iii) alternating, (iv) circumstance:

- (1) Wŏmen kāi huì tăolùn nèi-ge wèntí.<sup>3</sup>
  1PL hold meeting discuss that-CL problem
  'We'll hold a meeting to discuss that problem.' (purpose)
  'We'll discuss that problem holding a meeting.' (circumstance)
- (2) Tā tiāntiān chàng gē xiĕ xìn.
   3SG every:day sing song write letter
   'Every day she sings songs and writes letters.' (consecutive/alternating)

*2nd type:* "One verb phrase or clause is the subject or direct object of another verb" (p. 598).

(3)	<ul> <li>Tā fŏurèn tā zuò-cuò-le.</li> <li>3SG deny 3SG do-err-PERF</li> <li>'S/he denies that s/he was wrong.' (= Li and Thompson's (19))</li> </ul>
(4)	Tāgàosùwŏnĭtóu téng.3SGtell1SG2SGheadache'S/he told me that you had a headache.' (= Li and Thompson's (37))
(5)	Dàshēng niàn kèwén kĕyĭ bāngzhù fāyīn. loud read lesson can help pronunciation 'Reading the lesson aloud can help one's pronunciation.' (= Li and

<sup>3.</sup> The following abbreviations are used in glossing examples: CL classifier; PERF 'perfective aspect'; NEG negation; PART sentence-final particle; PL plural (e.g., 3PL = 3rd person plural); SG singular; SUB subordinator.

Thompson's (42))

(6) Xué Ménggŭhuà hĕn bù róngyì.
learn Mongolian very NEG easy
'It is not easy to learn Mongolian.' (= Li and Thompson's (43))

*3rd type:* The so-called *pivotal construction* where "a noun phrase [...] is simultaneously the subject of the second verb and the direct object of the first verb" (p. 607)

(7) Wŏ quàn tā xué yīxué.
1SG advise 3SG study medicine
'I advised him/her to study medicine.' (= Li and Thompson's (61))

*4th type:* The so-called *descriptive clause construction* which "involves a transitive verb whose object is 'described' by a following clause" (p. 611):

- (8) Wõ pèngdào-le yī-ge wàiguórén huì shuō Zhōngguóhuà.
  1SG meet-PERF 1-CL foreigner can speak Chinese
  'I met a foreigner who can speak Chinese.' (= Li and Thompson's (76))
- (9) Tā chăo-le yī-ge cài tèbié hăochī.
  1SG fry-PERF 1-CL dish especially delicious
  'He has prepared a dish which is particularly delicious.' (= Li and Thompson's (78) slightly modified)

A quick glance suffices to see that the preceding list represents quite a rich array of phenomena.<sup>4</sup> In the following, I will demonstrate that in fact a range

- (i) Tā duān-le yī-wăn tāng shàng-lái le.
   3SG serve-PERF 1-bowl soup ascend-come PART 'He served up a bowl of soup (towards the speaker).'
- (ii) Tā duān-shàng-lái-le yī-wăn tāng le.
   3SG serve-ascend-come-PERF 1-bowl soup PART 'He served up a bowl of soup (towards the speaker).'

As illustrated in (i), contrary to its denomination, the sequence 'V<sub>displacement</sub> (- V<sub>direction</sub>) - come/go' cannot be a compound; the first verb can be suffixed with the perfective aspect marker *-le*, and the object can occupy a position within the sequence. This is precisely excluded for verbal compounds such as  $[_{V^{\circ}} p\bar{r}-ping]$ , 'criticize-judge' = 'criticize',  $[_{V^{\circ}} p\bar{a}o-qi]$ ' throw-discard' = 'abandon',  $[_{V^{\circ}} h\bar{e}-wan]$  'drink-finish' = 'drink up' etc., given the *Lexical Integrity Hypothesis* (cf. Huang 1984b and references therein), which states that word-internal structure is inaccessible to syntactic processes.

<sup>4.</sup> Interestingly enough, the so-called *directional verb compounds* are one of the very few phenomena involving several verbs which have *not* been subsumed under SVC in the literature (but cf. Ernst 1989 and Law 1996 for a first attempt in this direction):

of completely different constructions is subsumed under the unique label SVC here, thereby making the concept of SVC completely void. In other words, to "know" that a given multi-verb sequence is an SVC amounts to not knowing anything about the hierarchical relationship between the verbs (coordination of V1 and V2 vs. subordination of V1 to V2, or vice versa) and the associated interpretation.

Let us start with the first type where the SVC expresses two or more separate events and has four possible "interpretations": (i) circumstance, (ii) purpose, (iii) alternating, (iv) consecutive. A correction is immediately called for here: the so-called different "interpretations" in reality indicate the existence of different *structures*, i.e., the surface string in (10a) can be parsed in two different ways (for which evidence will be provided in (14)–(15) below). VP<sub>1</sub> is either contained in an adjunct clause as in (10b) (leading to the "circumstance" interpretation) or it constitutes the matrix predicate as in (12) (leading to the "purpose" interpretation):

(10)	a. <i>Wŏmen kāi huì tăolùn nèi-ge wèntí</i> . (=(1) above) 1PL hold meeting discuss that-CL problem
	b. $W \check{o} men_i [_{\nu P} [_{adjunct clause} PRO_i k\bar{a}i hui] [_{\nu P} t \check{a}ol un hold meeting discuss]$
	<i>nèi-ge wèntí</i> ]]. that-CL problem 'We'll discuss that problem holding a meeting.'
(11)	Wŏmen       [vP [adjunct míngtiān / zài xuéxiào / yīdìng]         1PL       tomorrow / at school / certainly         [vP tăolùn nèi-ge wèntí]].       discuss that-CL problem

'We'll discuss that problem tomorrow/at school/for sure.'

With *kai hui* 'hold a meeting' analyzed as a clause adjoined to the main VP and having an adverbial function, we obtain the structure and corresponding interpretation in (10b); the covert subject of the adjunct clause, noted as *PRO*,

(iii)  $Ta [_{V^{\circ}}h\bar{e}-(*-le) wán]-le y \bar{v}-w \check{a}n t \bar{a}ng.$ 3SG drink-PERF finish-PERF 1-CL soup 'He finished a bowl of soup.'

The sequences 'V<sub>displacement</sub> (- V<sub>direction</sub>) -come/go' have not received a satisfying analysis yet, in spite of the numerous studies devoted to them (cf. among others Fan, Jiyan 1963; Lu, John H.-T. 1973; Kimura 1984; Li, Linding 1984; Lu, Jianming 1985; Liu, Yuehua 1988; Chang, Hsun-Huei 1991; Zou, Ke 1994; Yang, Defeng 2004). For a new analysis in terms of an internal-argument sharing SVC à la Collins (1997) (cf. Section 3 below), see Paul (in preparation).

is controlled by the matrix subject *ta* 'he'. The structure of (10b) is thus on par with (11) where the main VP *taolun nei-ge wenti* 'discuss that problem' is modified by an adjunct NP, adjunct PP or adverb, respectively, rather than by a clause as in (10b). In the remainder of the article, I will refer to the structure illustrated in (10b),  $[S_i [_{vP} [_{adjunct clause} PRO_i VP] [_{vP} V (O) ]]]$ , as *adjunct structure*.

By contrast, in (12), it is *kai hui* 'hold the meeting' which is analyzed as the main VP and *taolun nei-ge wenti* 'discuss that problem' represents a purpose clause subordinate to the main VP:

(12)  $W \delta men_i [v_P \ k \bar{a}i \ hu i \ [purpose clause PRO_i \ t \check{a}ol i n \ n \dot{e}i-ge$ 1PL hold meeting discuss that-CL  $w \dot{e}nt i ]].$ problem 'We'll hold a meeting to discuss that problem.'

Given that the subject is obligatorily covert and controlled by the matrix subject, the general consensus is that the purpose clause is non-finite.<sup>5</sup> Furthermore, purpose clauses with a covert object (coreferential with the matrix object) in addition to the covert subject (cf. (13)) are in general analyzed as involving a null operator, whence the proposal that the purpose clause has the size of CP (cf., a.o., Huang 1984a and Tang 1990, whose analysis is adopted by Tsai 1995):

(13)  $T\bar{a}_i zh\check{u} t\bar{a}ng_j [CP Op_j [IP PRO_i h\bar{e} t_j].$ 3SG cook soup drink 'He cooked soup to drink.' (Tang 1990: 297, (82))<sup>6</sup>

(13) is thus analyzed on a par with English sentences such as *I bought a book to read*, modulo the introduction of the *Generalized Control Rule (GCR)* proposed by Huang (1984a: 552), extending Chomsky's (1980) rule of control to cover both *pro* and PRO.<sup>7</sup> Importantly, as pointed out by Huang (1984: 569), the purpose clause is not an argument of the matrix verb, but rather a modifier or predicate, i.e., the purpose clause structure illustrated by sentences such as

<sup>5.</sup> For discussion of the finite vs. non-finite distinction in Mandarin Chinese, cf. Huang (1982); Li (1990); Ernst (1994); and Tang (2000), among others.

<sup>6.</sup> Note that according to Tang (1990: 300–301), control constructions are an instance of SVC: "[...] in Chinese serial verb constructions are control constructions and are in the form of [NP VP CP]." For Li and Thompson (1981: 618-620), a purpose clause structure with both a covert subject and object such as (13) illustrates a variant of the fourth type of SVC, which they label *irrealis descriptive clause*.

<sup>7. &</sup>quot;Coindex an empty pronominal with the closest nominal element." (Huang 1984a: 552, (61)).

(12) and (13), [S<sub>i</sub> [ $_{\nu P}$  V (O) [ $_{CP}$  [ $_{IP}$  PRO<sub>i</sub> [ $_{\nu P}$  V (O) ]]]]], does not involve complementation.<sup>8</sup>

The difference between the adjunct structure, on the one hand, and the purpose clause structure, on the other, is e.g. reflected in the distribution of the perfective verb suffix *-le*. Since *-le* marks the main verb, (14a) and (15a) must be analyzed as adjunct structures and (14b) and (15b) as purpose clause structures:<sup>9</sup>

(14)	a.	$W \check{o} men_i$ $[_{\nu P} [_{adjunct clause} PRO_i k\bar{a}i hui]$ $[_{\nu P} ]$ 1PLhold meeting
		tăolùn-le nèi-ge wèntí]].
		discuss-PERF that-CL problem
		'We have discussed that problem holding a meeting.'
	b.	Women <sub>i</sub> [vp kāi-le san-ci huì [cp PRO <sub>i</sub> tăolùn
		1PLhold-PERF 3-time meetingdiscuss
		nèi-ge wèntí]].
		that-CL problem
		'We held three meetings to discuss that problem.'
(15)	a.	$T\bar{a}$ [vP [adjunct clause PRO <sub>i</sub> dă diànhuà] [vP jiào-le
		3SG strike phone call-PERF
		chē]] yĭhòu hái dĕng-le èrshí-fēnzhōng.
		car after still wait-PERF 20-minute
		'After she had called a taxi by phone, she still waited for twenty minutes.'
	b.	$T\bar{a}_i [_{vP} d\breve{a}$ -le $y\bar{i}$ -cì diànhuà] [ <sub>CP</sub> PRO <sub>i</sub> jiào chē]]
	0.	3SG beat-PERF 1-time phone call car
		'He made a phone call to order a taxi.'
	c.	Tā dă diànhuà jiào chē.
		3SG strike phone call car
		(i) 'He called a taxi by phone'
		(ii) 'He made a phone call to order a taxi.' (Li, Linding 1986:

135)

Note that in the remainder of the article I will concentrate on the purpose clause structure with a covert subject only.

<sup>9.</sup> The boundedness of the event required by the perfective suffix -le can either be obtained by quantifying the object (as in (14b) and (15b), if it is not definite as in (14a)) or by embedding the clause in a complex sentence as in (15a). This explains why the examples illustrating the difference between the adjunct structure and the purpose clause structure do not constitute perfect minimal pairs. Also note that some of the native speakers consulted preferred the presence of *lái* 'in order to' preceding the purpose clause in (14b) and (15b).

Note in passing that Li Linding himself observes the two different "interpretations" possible for (15c), but like Li and Thompson, he does not link the availability of different interpretations to the existence of different parsing possibilities. (For further discussion of the adjunct structure and the purpose clause structure, cf. Section 2.2 below.)

So far I have discussed the *circumstance* and *purpose* "interpretation" invoked by Li and Thompson for a sentence such as (10a) (repeated in (16a) below), and provided the corresponding structures, i.e., the adjunct structure and the purpose clause structure. Contrary to Li and Thompson's claim, such a sentence can precisely *not* be analyzed as a coordinate structure, giving rise to the "consecutive" or "alternating" interpretation. This is only possible when a pause occurs between the two VPs (16b) or in the presence of explicit marking by, e.g., adverbs (17a) (also cf. Chao 1968: 325–326; Li, Linding 1986: 132):<sup>10</sup>

(16)	a.	Wŏmen kāi huì tăolùn nèi-ge(=(10a) above)1PLhold meeting discuss that-CLwèntí.
		problem
	b.	Wŏmen [ <sub>vP</sub> [ <sub>vP</sub> kāi huì], [ <sub>vP</sub> tăolùn nèi-ge
		1PL hold meeting discuss that-CL
		wèntí]]. problem
		'We hold a meeting and discuss that problem.'
(17)		
(17)	a.	
		3SG one-side clap hand one-side laugh
		'He is clapping hands and laughing simultaneously.'
	b.	* $T\bar{a} [_{\nu P} [_{\nu P} p\bar{a}i sh o u] [_{\nu P} xi a o]].$
		3SG clap hand laugh
		(Intended meaning: 'He claps his hands and laughs.')
	c.	$T\bar{a}_{i}$ [ $_{vP}$ [ $_{adjunct clause}$ $PRO_{i}$ $p\bar{a}i(-zhe)$ $showardowardowardowardowardowardowardoward$
		3SG clap-DUR hand laugh

<sup>&#</sup>x27;He laughs (while) clapping his hands.'

<sup>&</sup>quot;unmarked" as they pretend it to be. On the contrary, it is the presence of the adverb *tiantian* 'every day' in combination with a pause between the two VPs which makes it possible to analyze (i) as a coordinate structure and which furthermore favours the interpretation in terms of alternating actions (rather than as consecutive or simultaneous actions).

 <sup>(</sup>i) Tā <u>tiāntiān</u> chàng gē xiĕ xìn.
 3sG every:day sing song write letter 'Every day she sings songs and writes letters.'

Importantly, as illustrated in (17b–c), an analysis in terms of a coordinate construction is precisely not a viable analysis for a sentence with two VPs lacking any overt marking. Instead, the sentence is parsed as an adjunct structure, which for some speakers necessitates the presence of the durative aspect suffix *-zhe* in the adjunct clause (for further discussion, cf. Section 2.2 below).

The second type mentioned by Li and Thompson where "[o]ne verb phrase or clause is the subject or direct object of another verb" in fact groups together two different structures: one where V<sub>1</sub> is contained in a sentential subject (cf. (18)–(21)) below) and one where V<sub>1</sub> selects a complement clause (cf. (25)– (26) below). These two structures not only differ from each other, but are also clearly distinct from the adjunct and the purpose clause structure discussed above; nonetheless, all four are claimed to instantiate SVC.

Let us first look at the sentential subject structure. As illustrated in (18)–(21), the sentential subject constitutes a finite propositional domain of its own whose subject may be overt or covert (PRO<sub>arb</sub>) and which can be negated independently of the matrix predicate:

- (18) [TP Nĭ bù kĕn bāngzhù péngyou] zhēn bù xíng.
   2SG NEG want help friend really NEG possible
   'That you're not willing to help your friends is really not acceptable.'
- (19) [TP PRO<sub>arb</sub> zhĭ tīng bù niàn] bù néng bāngzhù only listen NEG read NEG can help fāyīn.
   pronunciation 'Only listening without reading cannot help one's pronunciation.'
- (20)  $[_{TP} PRO_{arb} z \dot{a}i zh \dot{e}li t ing ch\bar{e}] b \dot{u} w \dot{e}izh \bar{a}ng.$ at here stop car NEG against:rules 'To park here is not against the rules.'
- (21) [<sub>TP</sub> *Tā méi lái*] *zhēn qíguài*. 3SG NEG come really strange 'That he hasn't come is really strange.'

This clearly contrasts with the adjunct structure where negation may only occur once and must precede the adjunct clause (cf. Tang 2000: 204; a.o.):<sup>11</sup>

<sup>11.</sup> This is not to say that the VP within the adjunct clause itself cannot be negated (cf. Teng 1974: 136). However, these cases (cf. (i)) require a clear context favouring such a parsing, because in general, negation preceding the adjunct clause is understoood as having matrix scope (thus including  $\nu$ P-adjoined material):

<sup>(</sup>i) Nimen<sub>i</sub> [<sub>vP</sub> [adjunct clause PRO<sub>i</sub> bu yong shou] [<sub>vP</sub> chi dangao]]. 2PL NEG use hand eat cake 'Eat the cake without using your hands.' (e.g., in a contest at a birthday party)

(22) Wõ méi dă diànhua (\*méi) zhēngqiú Lĭsì de yìjiàn.
 1SG NEG strike phone NEG solicit Lisi SUB opinion 'I haven't solicited Lisi's opinion by phone.'

That in (18)–(21) the first verb is contained within a sentential subject is demonstrated by the unacceptability of A-*not*-A question (cf. Huang 1982) where the verb is juxtaposed with its negative counterpart (cf. (23c)). Huang (1981/82) shows that (23c) involves a subjacency violation in the same way as A-*not*-A questions in relative clauses and sentential topics. By contrast, V<sub>2</sub>, the matrix verb, can be questioned (cf. (23b)):

(23)	a.	[Dàshēng	niàn	kèwén]	kĕyĭ	bāngz	zhù fe	āyīn.
		loud	read	lesson	can	help	р	ronunciation
		'Reading t	he less	on alou	d can ł	nelp on	e's pro	onunciation.'
	b.	[Dàshēng	niàn	kèwén]	kĕyĭ	<u>bù</u>	kĕyĭ	bāngzhù
		loud	read	lesson	can	NEG	can	help
		fāyīn?						
		pronunciat	ion					
		'Can readi	ng the	lesson a	aloud h	elp one	e's pro	nunciation?'
	c.	*[Dàshēng	<u>niàn</u>	<u>bù</u>	<u>iàn</u> k	kèwén]	kĕyĭ	bāngzhù
		loud	read	NEG 1	ead 1	esson	can	help
		fāyīn?						
		pronunciat	ion					
		5 5	ion					

Example (24) finally illustrates that the verb within the sentential subject may be marked for aspect; in combination with the possibility of an overt subject (cf. (18), (21) above) this indicates the finite character of the propositional domain constituting the sentential subject:

(24)  $\begin{bmatrix} TP & T\bar{a} & q\hat{u}(-le) & m\check{e}igu\acute{o} \end{bmatrix}$  zhēn kĕxī. 3SG go-PERF America really a.pity 'It's really a pity that he went to America.'

This latter point is important for the comparison of the sentential subject structure with the structure where the verb selects a complement clause; in the latter, the presence of *-le* is precisely excluded for  $V_1$  (see (25a), (26a) below). Accordingly, to put these two constructions into one and the same group leads to wrong predictions concerning, e.g., the distribution of the aspectual suffix *-le* and must therefore be rejected.

(25)	a.	Τā	[vP	fŏurèn(*-le)	[TP	tā	zuò-cuò-le	zhèi-jiàn	
		3sg		deny-PERF		3sg	do-err-PERF	this-CL	
		shì].							
		matte	er						
		'S/he denied that s/he handled this matter wrongly.'							

	b.	Tāfŏurèn(-le)[DPzhèi-gecuòwù].3SGdeny-PERFthis-CLmistake'S/hedeniedthis error.'
(26)	a.	$T\bar{a}$ $g a osu(*-le)$ $w o$ $[TP$ $n \breve{i}$ $y \breve{e}$ $c \bar{a} n j i \bar{a} - l e$ $s \bar{a} n - c \check{i}$ $3SG$ tell-PERF $1SG$ $2SG$ alsoassist-PERF $3-CL$ $huiyi$ ].meeting'He told me that you assisted the meeting, too.'
	b.	$T\bar{a}$ $g a osu(-le)$ $w o [DP n - de g u shi].$ 3SG tell-PERF 1SG 2SG-SUB story 'He told me your story.'

The (b) examples with a nominal complement show that the verbs themselves are perfectly compatible with -le and that the unacceptability of -le in (25a)–(26a) must therefore be due to the structure. Note that the clausal complement is finite and allows for an overt subject as well as aspect markers.

Finally, the verb in the clausal complement can be negated independently of the matrix predicate, indicating that it constitutes a propositional domain of its own:

- (27) a. Tā méi gàosu wõ [nĭ yĕ cānjiā huìyì].
   3SG NEG tell 1SG 2SG also attend meeting 'He didn't tell me that you, too, attended the meeting.'
  - b. Tā gàosu wõ [nĭ méi cānjiā huìyì].
     3sG tell 1sG 2sG NEG attend meeting 'He told me that you didn't attend the meeting.'
  - c. Tā méi gàosu wǒ [nǐ yẽ méi cānjiā huìyì].
    3SG NEG tell 1SG 2SG also NEG attend meeting 'He didn't tell me that you, too, didn't attend the meeting.'

Two completely different constructions, one involving a sentential subject, the other involving a complement clause subcategorized for by the matrix verb, are subsumed under the same (second) type (of SVC). The distribution and interpretation of negation as well as the possibility of an overt subject indicate that the sentential subject and the complement clause form a propositional domain independent of the matrix predicate, with a subject different from the matrix subject. Consequently, the structure with a sentential subject and that with a clausal complement do not even satisfy the loosest of all "criteria" for "SVC-hood", i.e., uniqueness of the subject within an SVC.

As for Li and Thompson's (1981: 600) statement that "in sentences of this type [with a complement clause, cf. (25)–(26); WP] the meaning of the first verb determines the type of verb phrase or clause that functions as its direct

object", it amounts to acknowledging the selectional restrictions imposed by a verb on its complement. To impose selectional restrictions, however, is a general property of verbs and not a particularity of verbs when part of a SVC.

Last, but not least, the discussion so far already amply illustrates the consequences of the fundamental indeterminacy of the term SVC, which allows to subsume under the same label four completely different structures: the adjunct structure (with  $V_1$  contained in a clause adjoined to the matrix vP), the purpose clause structure (with  $V_1$  heading the matrix vP), the sentential subject structure (with  $V_1$  in the sentential subject), and the complement clause structure (with  $V_1$  in the matrix predicate selecting a clausal complement).

The third type of SVC postulated by Li and Thompson is the so-called *piv*otal construction where "a noun phrase [...] is simultaneously the subject of the second verb and the direct object of the first verb" (Li and Thompson 1981: 607). Once again this is not a special construction typical of Chinese nor of "serializing" languages. On the contrary, it instantiates the *object control construction* well-known from other languages, where the matrix object controls, i.e., determines the reference of, the null subject in the embedded nonfinite clause (cf. Ross 1991; Lee 1996: 315; Tang 2000): <sup>12</sup>

- (28) a. Wõ quàn tā<sub>i</sub> [PRO<sub>i</sub> / (\*nĭ) xué yīxué]. 1SG advise 3SG 2SG study medicine 'I advised her to study medicine.' (\*'I advised her that you should study medicine.')
  b. Wõ quàn(\*-le) tā<sub>i</sub> [PRO<sub>i</sub> / (\*nĭ) xué yīxué].
  - 1SG advise-PERF 3SG 2SG study medicine 'I advised her to study medicine.'

An overt subject being excluded, the clausal complement of an object control verb is clearly nonfinite, as in the case of the clausal complement of subject control verbs (cf. Huang 1982: 5.4; Li 1990; Tang 2000):

(29) Wo zhunbei [PRO mingtian lai].
1SG prepare tomorrow come
'I expect to come tomorrow.' (Huang 1982: 350, (87))

Note that the nonfinite clause in the (subject and object) control structure may be negated (cf. (30)–(32), unlike the nonfinite clause in the purpose clause structure (33):

<sup>12.</sup> While there is a consensus about the nonfinite nature of the clausal complement with control verbs, among the studies cited only Tang (2000: 201) discusses the size of this complement, which is TP for him.

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- (30)  $W \check{o} q u \grave{a} n t \bar{a} b \grave{u} y \grave{a} o x \bar{i} d \acute{u}$ .<sup>13</sup> 1SG advise 3SG NEG want inhale drug 'I advised her not to take drugs.'
- (31) Wõ qiú tā bù yào bèipàn wõ.
  1SG beg 3SG NEG want betray 1SG
  'I implored her not to betray me.'
- (32) Wõ dāying Lĭsì bù bă mìmì gàosu biérén.
  1SG promise Lisi NEG BA secret tell somebody 'I promised Lisi not to divulge his secret.'
- (33) \*Wŏ dă diànhuà bù zhēngqiú Lĭsì de yìjiàn.<sup>14</sup>
   1SG strike phone NEG solicit Lisi SUB opinion (intended meaning: 'I phoned, but not in order to solicit Lisi's opinion.')

The fourth type of SVC finally, called *descriptive clause construction* by Li and Thompson (1981: 611) and having the surface form 'S V O XP', has been analyzed by Huang (1984a, 1987) as involving a (secondary) predication (XP) on the object NP. This analysis allows him to account for the different constraints holding for the object NP as well as for the matrix predicate.

First, the object NP must be specific and indefinite; definite NPs and bare nouns are excluded (cf. (34a), (35a)):

(34) a. Wõ pèngdào-le yī-ge wàiguórén / \*nèi-ge wàiguórén / 1SG meet-PERF 1-CL foreigner / that-CL foreigner / \*wàiguórén huì shuō zhōngguóhuà.
 foreigner can speak Chinese
 'I met a/that foreigner/foreigners who can speak Chinese.'

(i)  $W\delta = qu\dot{a}n / b\bar{t} t\bar{a} + hu\dot{t} l\dot{a}i$ . (Li, Y.A. 1990: 22, (12a)) 1SG advise / force 3SG will come

(i) Wõ dă diànhuà bù shì zhēngqiú Lĭsì de yìjiàn, shì qǐng
 1SG strike phone NEG be solicit Lisi SUB opinion be invite
 Lĭsì chī fàn.
 Lisi eat food

<sup>13.</sup> As pointed out by Li, Y.A. (1990: 21–22) and Tang (2000), not all auxiliaries are excluded from non-finite propositions. While, e.g., *yao* 'want, intend' is admitted here (cf. (30), (31)), *hui* indicating the future is not:

<sup>14.</sup> In order to express the meaning intended here, one must use the sentential negation  $b\dot{u} sh\dot{i}$  'it is not the case' (for the differences between  $b\dot{u}$  and  $b\dot{u} sh\dot{i}$ , cf. a.o. Teng 1974):

<sup>&#</sup>x27;I phoned, not in order to solicit Lisi's opinion, but in order to invite Lisi for a meal.'

b.	Wŏ pèngdào-le [ <sub>DP</sub> (yī / nèi-ge) [ <sub>TP</sub> huì shuō
	1SG meet-PERF 1 / that-CL can speak
	zhōngguóhuà] de wàiguórén].
	Chinese SUB foreigner
	'I met a/that foreigner/foreigners who can speak Chinese.'

(35)chăo-le yī-ge cài / \*nèi-ge cài / \*cài Τā a. 1SG fry-PERF 1-CL dish / that-CL dish / dish tèbié hăochī. especially delicious 'He prepared a/that dish/dishes which is/are particularly delicious.' Τā b. chăo-le [DP (yī / nèi-ge) [AP tèbié 1SG fry-PERF 1 / that-CL especially *cài*].<sup>15</sup> hăochī] de delicious SUB dish 'He prepared a/that particularly delicious dish/ particularly deli-

(34b) and (35b) show that no similar constraints hold for prenominal modifiers; the relative clause *huì shuō zhōngguóhuà* 'who can speak Chinese' and the AP *tèbié hǎochī* 'particularly delicious' are acceptable, irrespective of the nature ((in)definite), (non)referential) of the NP.

cious dishes.'

Second, the matrix predicate must be "existential" of some sort, either by its inherent lexical meaning (as in the case of, e.g.,  $y\delta u$  'have',  $f\bar{a}sh\bar{e}ng$  'happen') or by the fact that it is marked with the perfective aspect suffix *-le* or the experiential aspect suffix *-guo*; otherwise e.g., with the durative aspect marker  $z\dot{a}i$  or with a future-oriented auxiliary such as  $xi\delta ng$  'want to' in the matrix predicate, the secondary predicate is not acceptable:

(36)	a.	Wŏ	уŏи	jiāc	o-guo	jĭ-ge	xuéshēn	g hĕn
		1SG	have	/ tead	ch-EXP	several-CL	student	very
		yòng	gōng.					
		dilig	ent					
		'I ha	ve/ tau	ght sev	eral stu	dents who a	re very dil	igent.'
	b.	*Wŏ	zài	jiāo	jĭ-ge	xuésh	ēng hĕn	yònggōng.
		1SG	DUR	teach	severa	l-CL studer	nt very	diligent

('I'm teaching several students who are very diligent.')

<sup>15.</sup> For arguments in favour of adjectives as a part of speech distinct from (stative) verbs, cf. Paul (2005a) and references therein.

	c.	Wŏ jiāo-guo / zai jiāo [ <sub>DP</sub> (jĭ-ge) hĕn 1SG teach-EXP / DUR teach several-CL very yònggōng de xuéshēng]. diligent SUB student 'I taught/am teaching several students who are very diligent.'
(37)	a.	<ul> <li>*Tā xiăng chăo yī-ge cài tèbié (compare (35a))</li> <li>1SG want fry 1-CL dish especially</li> <li>hăochī.</li> <li>delicious</li> <li>('He wants to prepare a dish which is particularly delicious.')</li> </ul>
	b.	Tā xiăng chăo / chăo-le[DP yī-ge tèbié hăochī1SG want fry / fry-PERF1-CL dish especiallyde cài].SUB delicious('He wants to prepare/prepared a particularly delicious dish.')

In the case of prenominal modifiers (cf. (36c), (37b)), by contrast, no such requirements on the matrix predicate are observed.

As Huang (1984a, 1987) points out, the constraints holding for both the matrix predicate and the object DP are incompatible with an analysis considering the modifier XP as part of the DP. For it would be very unusual for a nominal modifier to be acceptable only if the DP in question is indefinite/specific and to depend on the nature of the VP. Taking furthermore into account that the XP provides a non-restrictive modification, he concludes to its status as a secondary predicate (Huang 1987: 235). The "specificity effect" stated for the object DP is attributed to the general existential nature of the matrix predicate, similar to the definiteness effect observed for existential constructions in English (Safir 1982), although Huang (1987: 250) himself as well as Tsai (1994: 171–175) acknowledge problems for this explanation. Huang (1984a: 569) proposes a structure along the following lines:<sup>16</sup>

<sup>16.</sup> Both Huang (1984a, 1987) and Tsai (1994: 169) (who adopts Huang's analysis) concentrate on the nature of the empty category within the clause predicating on the matrix object and do not indicate the exact size of the clause nor the structure above it. However, in the text Huang (1984: 232) states explicitly that "the sequence V – NP – XP is dominated by VP", i.e., the secondary predicate is embedded in vP or AspP, respectively.

With respect to the nature of the empty category, analyzed as a variable bound by an abstract operator, the structure with the secondary predicate resembles the structure for the purpose clause with a covert object in addition to the covert subject:

(39)  $T\bar{a}_i \ zh\breve{u} \ t\bar{a}ng_j \ [_{CP} Op_j \ [_{IP} pro_i \ h\bar{e} \ t_j ].$  (=(13) above) 3SG cook soup drink 'He cooked soup to drink.'

There are, however, two major differences. The purpose clause contains a PRO controlled by the matrix subject, and furthermore, the matrix object DP here is not subject to any conditions such as the specificity effect, as witnessed by the acceptability of a bare noun as object in (39).

The preceding discussion of the structure involving a secondary predication shows that the constraints at work here are completely different from those observed for the other "types" of SVC, i.e., the adjunct structure, the purpose clause structure, the sentential subject structure, the complement clause structure, and the control structure.<sup>17</sup> This once again questions the plausibility of subsuming all these distinct structures under the same label SVC.

To summarize my critical analysis of the seven "types" of SVC established by Li and Thompson (1981),<sup>18</sup> I have argued in detail that completely different constructions are involved here, with in each case a different set of syntactic and semantic properties.<sup>19</sup> In this respect, Li and Thompson (1981) are representative of the Chinese literature which adopts an equally large coverage of the term SVC. Li, Linding (1986: Ch. 14), for example, on the one hand excludes coordinate constructions and control constructions from the phenomena subsumed under the term SVC, but on the other hand includes structures not considered as SVC by Li and Thompson, such as complex sentences with conditional and clausal clauses as well as sentences with preverbal adjunct PPs.

<sup>17.</sup> This approach is not only unsatisfying from a theoretical point of view, but also from a pedagogical one. For its descriptive inadequacy leads to wrong predictions concerning the distribution of aspect markers, negation etc., the correct knowledge of which is indispensable to every language learner.

<sup>18.</sup> Given that some of the four major types are further subdivided, we obtain no less than seven "types" of SVC. This quantitative inflation in itself already hints at the futility of using the same cover term SVC.

<sup>19.</sup> Examing SVCs in Cantonese, Matthews (2006) criticizes Li and Thompson (1981) for their too encompassing view of the term SVC and excludes object control structures as well as complement clause structures, because they are not monoclausal and do not have the same subject. On the other hand, he nevertheless maintains the concept of SVC as a useful one for the description of Sinitic languages and considers adjunct structures, purpose clause structures, and causative structures of the type 'I made him fall' as instances of SVC.

Zhu, Dexi (1982: Ch. 12) likewise discards coordinate constructions and treats sentences with preverbal adjunct PPs (cf. (11) above) as SVC; in contrast to Li, Linding (1986), however, subject and object control constructions are included among the SVC, along with other structures. Lü, Shuxiang (2000: 36 ff.) also classifies as SVC nearly as wide an array of phenomena as Li and Thompson (1981), again with the noteworthy exception of coordinate constructions.<sup>20</sup>

To indistinctly call all of these cases "SVC" amounts to no more than stating the rather trivial fact that they all contain two (or more) verbs. The term SVC, despite its claim to the status of *construction*, is therefore nothing else but a surface label referring to the linear sequence of constituents, and in no case gives us any indication as to the hierarchical relationship between the verbs, let alone the exact syntactic structure of the sequence at hand. Viewed from this perspective, the great majority of Chinese sentences could be considered SVCs. This is indeed what Li and Thompson (1981: 594) claim: "[...] in Mandarin there are many sentences that all have the same form, namely [...] (NP) V (NP) (NP) V (NP) [...]". Last, but not least, note that all the constructions subsumed under the single term SVC by Li and Thompson also exist in so-called "nonserializing" languages, which makes the term SVC completely void.

#### 2.2. SVC in a "narrow" sense (Li and Thompson 1973)

As discussed in detail above, in Li and Thompson's (1981) conception, the term SVC covers a very large variety of phenomena. As to be argued for in this section, even their earlier and more constrained view of what constitues an SVC (cf. Li and Thompson 1973) proves equally inadequate, because once again the term *construction* is employed as a pure surface label encompassing separate constructions with different syntactic and semantic properties.

Let us first look at the quote below from Li and Thompson (1973: 99):

We claim [...] that it is 'knowledge of the world', and not linguistic knowledge which is responsible for suppressing or encouraging a particular reading for a

<sup>20.</sup> In comparison, Chao (1948: 38, 1968: 325), who was the first to introduce the concept of SVC into Chinese linguistics, under the label of *verbal expressions in series*, adopts a much more restrictive view:

Verbal expressions in series (V–V series) form an intermediate type between coordinate and subordinate constructions, but are nearer the latter than the former. [...] a V–V series is like a coordinate construction in that it can usually be reversed and remain grammatical, but differs from it in not being reversible without involving a probable change in the sentence value. (Chao 1968: 325–326).

Furthermore, for Chao (1968) the verbs in a SVC are assumed to have the same subject, a property which is not stated explicitly but becomes apparent when used as a criterion to distinguish SVCs from object control constructions (cf. Chao 1968: 327).

serial verb sentence. [...] the choice between them in any given speech situation depends on the context and the hearer's knowledge of what the world is like. What is the optimal linguistic account of these facts? We will demonstrate in the following that there is ample evidence in favor of a structural distinction between one serial verb representation expressing purpose and another expressing any of the conjunction meanings [...] we claim, then, that sentences with consecutive, simultaneous, and alternating action readings are all structurally conjunctions, and that *such sentences do not convey any structural or semantic information concerning the relationship in time between the two events in the predicate.* Whether the actions are taken to be consecutive, simultaneous, or alternating depends completely on inferences which the hearer makes.

- (40) *Ta guì xiàlai qiú wŏ.* 3sG kneel down beg 1sG (= Li and Thompson 1973: 98; (1), (1'))
  - (i) 'He knelt down in order to beg me.' (purpose)
  - (ii) 'He knelt down and then begged me.' (consecutive actions)
  - (iii) 'He knelt down begging me.' (simultaneous actions)
  - (iv) 'He knelt down and he begged me.' (alternating actions).

Li and Thompson (1973) is clearly superior to their own subsequent analyses in acknowledging two different *structures*, a coordinated one for the interpretation in terms of consecutive, alternative or alternating actions, on the one hand, and a subordinate one for the purpose clause interpretation, on the other hand. Nevertheless, their point of view remains problematic.<sup>21</sup>

First, they do not make the in fact logically necessary step to the conclusion that the so-called SVC cannot be a unique construction if it can systematically be assigned two completely different structures with separate properties. Instead, they state a systematic ambiguity for the SVC in Chinese (Li and Thompson 1973: 102).

Second, the multiple ambiguity claimed for a surface string such as (40) by Li and Thompson (which in fact would be a case of structural ambiguity) does not actually exist to that extent. More precisely, sentences with a simple jux-taposition of VPs and without overt marking indicating the relation between these two VPs do *not* lead to an interpretation in terms of simultaneous, alternating or consecutive actions, i.e., they cannot be analyzed as coordinate structures (cf. Chen 1993: 50; Chan 1974). As discussed in Section 2.1. above

<sup>21.</sup> Note that Li and Thompson (1973) went more or less unnoticed and that it was Li and Thompson (1974, 1981) which had the biggest impact on the field. As later in their grammar (Li and Thompson 1981), Li and Thompson (1974) only mention the availability of different *interpretations* for a sentence such as (40) and do not link the observed difference in interpretation with a difference in structure, as they do in Li and Thompson (1973).

(cf. (16), (17)), a pause between the two VPs or explicit marking by, e.g., adverbs (such as *yimian* ... *yimian* 'at the same time') is indispensable for an analysis in terms of a coordinate structure. For the juxtaposition of VPs in the absence of any marking, this analysis is precisely not avalaible, and even less so a default analysis.

Instead, sentences with a simple juxtaposition of VPs such as (40) are either analyzed as a purpose clause structure (corresponding to (40i)) or as an adjunct structure (giving rise to the interpretation dubbed "circumstance" by Li and Thompson 1981, which is not discussed by Li and Thompson 1973):<sup>22</sup>

(41)	$T\bar{a}_{i}$ [ <sub>vP</sub> guì xiàlai [ <sub>CP</sub>	PRO <sub>i</sub> qiú wŏ]].
	3sg kneel down	beg 1SG
	'He knelt down in order to be	eg me.'
(42)	$T\bar{a}_{i} = [_{\nu P} [_{adjunct clause} PRO_{i}]$	guì xiàlai] [ <sub>vP</sub> qiú wŏ]].
	3sg	kneel down beg 1SG
	'He begged me kneeling dow	/n/on his knees.'

The 'A- $b\dot{u}$ -A' question (cf. Huang 1982) provided as a test by Li and Thompson (1973) to distinguish the purpose clause structure from a coordinate structure can equally be used to illustrate the syntactic differences between the purpose clause structure (41) and the adjunct structure (42) (in addition to the aspect marking test provided in Section 2.1. above). As pointed out by Li and Thompson (1973: 101), sentence (43) where the positive and the negative form of the verb are juxtaposed to indicate the question status can only be interpreted as a purpose clause:

(43) Nĭ <u>guì</u> <u>bu</u> <u>guì</u> xiàlai qiú Zhāngsān?
2SG kneel NEG kneel down beg Zhangsan
'Do you kneel down to beg Zhangsan?' (Li and Thompson 1973: 101, (20))

While Li and Thompson (1973) associate the 'A- $b\dot{u}$ -A' question formation with main verb status, Tang (2000) demonstrates that the crucial factor is in fact finiteness. Since the purpose clause itself has been shown to be nonfinite (cf. Section 2.1 above), main verb status and finiteness coincide here. This can also be illustrated for my example of a purpose clause structure given above, where the 'A- $b\dot{u}$ -A' question formation again must apply to the matrix predicate (V<sub>1</sub>):

<sup>22.</sup> The three interpretations (40ii–iv), including the one of simultaneous actions (iii), being explicitly linked to a coordinate structure, Li and Thompson (1973) do not take into account the adjunct structure nor the meaning associated to it: 'He begged me kneeling down/on his knees.'

(44) Tāmeni kāi bù kāi huì [CP PROi (cf. (12) above)
3PL hold NEG hold meeting
tăolùn nèi-ge wèntí]?
discuss that-CL problem
'Do they hold a meeting to discuss that problem?'

(44) as well can only be parsed as a purpose clause structure with *kai hui* 'hold meeting' as the matrix predicate.

When it is the second verb that is in the 'A- $b\dot{u}$ -A' form (a case not discussed by Li and Thompson 1973), the resulting sequence must be parsed as a complex sentence:

(45) [TopP [TP Tāmeni kāi huì] [TP proi tăolùn bù tăolùn 3PL hold meeting discuss NEG discuss nèi-ge wèntí]]? that-CL problem 'When they hold a meeting, will they discuss that problem?'

While this is partly as expected insofar as the VP in the A-bu-A form must again be analyzed as the matrix predicate, the constituent containing the first VP does not constitue an adjunct clause with a covert subject (cf. (42)), but rather represents a temporal clause (with an overt subject) occuping the specifier of Topic Phrase (cf. Gasde and Paul 1996).<sup>23</sup> Importantly, even though this parsing as a complex sentence is somewhat different from what we expected at first sight, it does *not* involve a coordinate structure, once again strengthening the observation made above that such an analysis requires overt marking.

We thus obtain the following picture. The default analysis of a surface string 'VP<sub>1</sub> VP<sub>2</sub>' without any markers is either an analysis where the first VP is an adjunct of the second (main) VP, or an analysis where the first VP is the main VP and the second VP represents a purpose clause whose covert subject is controlled by the matrix subject. An analysis as a coordinate structure is, however, excluded. Consequently, even Li and Thompson's (1973) "narrow" conception of the SVC as denoting two or more *separate* events giving rise to four different "interpretations" (purpose; consecutive, alternating, or simultaneous events) remains inadequate. For it wrongly claims the coordinate structure analysis (underlying the interpretation as consecutive, alternating

<sup>23.</sup> The analysis provided in (45) with *tāmen* 'they' as subject of the first clause, and not the second, is motivated by sentences such as (i) where the main clause contains a subject different from the clause in Spec, TopP:

<sup>(</sup>i) [TopP [TP Tāmen kāi huì] [TP wǒmen kĕyĭ bù kĕyĭ xiūxi]]? 3PL hold meeting 1PL can NEG can rest 'May we rest when they hold a meeting?'

or simultaneous events) to be among the parsing possibilities. Furthermore, it makes wrong predictions for the interpretation of so-called SVCs; an adjunct structure such as (42) where the first VP is in an adjunct clause modifying the second VP is understood as a single event, and not as two separate events.

#### 2.3. The indeterminacy of the term SVC in formally oriented studies

The failure to correctly apply the basic notion of *construction* (as referring to a precise structure with a fixed set of syntactic and semantic properties) demonstrated for Li and Thompson's (1973, 1981) conception of SVC, is in fact ubiquitous in works invoking SVC in Chinese linguistics, also in formally oriented studies. The small sample below illustrates that the inherent indeterminacy of the term SVC leads to a surprising heterogeneity of analyses associated with SVC. It also shows that SVC are referred to in recent and current work as though a precise definition existed and the exact coverage of this term was agreed upon, contrary to fact.

Li, Y.A. (1990: 106–110) analyzes the double objet construction 'V DO  $g \tilde{e} i$  IO' (e.g.,  $m \tilde{a} i$  'sell' DO  $g \tilde{e} i$  IO') involving the preposition  $g \tilde{e} i$  'to, for' as a serial verb construction where '[V DO] [ $g \tilde{e} i$  IO]' represents a sequence of two VPs whose structural relationship is not further specified, besides stating a "dependence" of VP<sub>2</sub> on VP<sub>1</sub>.<sup>24</sup> This dependence not being marked overtly, the *Revised Principle of Temporal Sequence* comes into play requiring that the order of the syntactic units mirrors the temporal order of the corresponding events in the conceptual world (p. 108).

Li, Y. (1991: 111–113) – like Li and Thompson (1981) – classifies both the adjunct structure and the purpose clause structure as SVC, notwithstanding the fact observed by himself that in the former, the second verb is the main verb, while in the latter, it is the first verb.<sup>25</sup>

<sup>25. &</sup>quot;The perfective aspect marker *le* must be attached to the second verb *qie* to maintain the instrumental reading of this sentence [= (i); WP]." (Li 1991: 112)
"What distinguishes (13a) [= (ii); WP] from (11) [= (i); WP] is that in the former, the first verb denotes the central event and given the structure of VP [...] which also allows postverbal non-heads, this verb becomes the head of the VP predicate." (Li 1991: 113).

(i)	Τā	ná	dāo	qiè-le	ròu.		(= Li's 1991: 111, (11))
	3sg	take	knife	cut-PERF	meat		
	'He c	cut the	meat w	ith a knife.'			

(ii)  $T\bar{a}$  ná-le  $d\bar{a}o$  qiè ròu. 3SG take-PERF knife cut meat 'He took the knife to cut meat.' (= Li's 1991: 112, (13))

<sup>24.</sup> The VP status of 'gĕi IO' in 'V DO gĕi IO' is explicitly addressed and rejected in Zhang (1990). For a recent analysis of the double object construction in Mandarin Chinese, cf. Georgala, Paul and Whitman (2007).

Tsai (1995: 292–293) analyzes SVCs in terms of two conjoined CPs linked by a topic chain, to be interpreted as two consecutive events:

(46)  $\begin{bmatrix} T_{\text{TopP}} & \bar{A}ki\bar{u}_{]i} & [CP \ Op_i & [IP \ e_i \ chu\bar{a}n-le \ tu\bar{o}xie] \\ Akiu & wear-PERF \ slipper \\ \begin{bmatrix} CP \ Op_i & [IP \ e_i \ shang(-le) \ ke] \end{bmatrix} \\ attend-PERF \ class \\ 'Akiu wore slippers, and then went to school.' (Tsai 1995: 293, (32)) \end{bmatrix}$ 

Soh (1998: 157–161) applies a version of Collins' (1997) object sharing structure for SVCs (cf. Section 3 below) to the adjunct structure in (47a, c), with  $d\bar{a}o$ 'knife', the object of the verb  $n\dot{a}$  'take, hold' in the adjunct clause, as the alleged shared object of the two VPs (see (47b)). While it is not excluded that an instrument DP can be construed as a shared argument (e.g., in Ewe, cf. Collins 1997, Section 3.2), this is not the case in Mandarin Chinese where the clause containing  $n\dot{a} d\bar{a}o$  'take knife' is clearly in an adjoined position (cf. Section 2.1 above)

(47)	a.	Tā ná dāo qiè-le ròu.						
		3SG hold knife cut-PERF meat						
		'He cut the meat with a knife.'						
		(= Soh's translation, Soh 1998: 158, (4a))						
	b.	$\begin{bmatrix} vP1 & t\bar{a} \end{bmatrix} \begin{bmatrix} v1' & n\dot{a} \end{bmatrix} \begin{bmatrix} vP1 & d\bar{a}o_i \end{bmatrix} \begin{bmatrix} v1' & t_{na} \end{bmatrix} \begin{bmatrix} vP2 & pro_i \end{bmatrix}$						
		3sg hold knife						
		$\begin{bmatrix} v^2 & qi\dot{e} - le & [v_{P2} t_{qie} & r\dot{o}u] \end{bmatrix} \end{bmatrix} \end{bmatrix}$						
		cut-PERF meat						
		(Soh 1998: 159, (6))						
	c.	$T\bar{a}_{i}$ [ $_{vP}$ [ $_{adjunct \ clause}$ PRO <sub>i</sub> $n\dot{a}$ $d\bar{a}o$ ] [ $_{vP}$ $qi\dot{e}$ -le $r\dot{o}u$ ]]						
		3SG hold knife cut-PERF meat						
		'He cut the meat using a knife.'						

Also note that Soh (1998: 161) posits the possibility of object scrambling to a non-specified functional projection within the lower vP, i.e.,  $v_2P$ . Such a proposal does not only make wrong predictions for Chinese (where TP-internal object fronting is to a position *above* negation, hence *above* vP; cf. a.o. Ernst and Wang 1995; Paul 2002a, 2005b), but it is also a rather unusal postulate for SVC.

Finally, for Lin (2001: 222–227) a SVC involves a structure where  $V_1$  takes  $V_2P$  as its complement, but without there being any object sharing. Accordingly, a sentence such as (48a) has the structure in (48b) where *yòng* 'use' raises to the subject selecting light verb DO:

(48)	a.	yòng bǐ xiẽ (xìn) use pen write letter 'use a pen to write a letter'
	b.	$[_{VP} Agent [_{V'} [yong-DO] [_{VP} bi [_{V'} t_{yong} [_{VP} xie]]$
		use pen write
		(xìn)]]]]]
		letter
		(Lin 2001: 226, (48))

As illustrated in this short overview, more or less any structure can be associated with the term SVC; there exists no general awareness that the term SVC lacks a coherent definition and should hence be used with caution or perhaps not be used at all. That this too permissive view of SVC nevertheless persists in Chinese linguistics is mainly due to the fact that SVC is a conveniently loose label for all the constructions whose precise analysis still eludes us.

#### 2.4. Intermediate conclusion

Given that SVC in Chinese linguistics serves as a cover term for distinct constructions with different properties and does not refer to a unique structure with a predictable set of properties, to "know" that a given sequence is an SVC amounts to not knowing anything, neither its structure nor its syntactic and semantic characteristics. Though several linguists have come to a similar conclusion (cf. a.o. Chen 1993; Wippermann 1993), they have, however, not taken the logically necessary step: to abandon the term SVC in Chinese linguistics altogether. That is exactly what I want to propose here, the more so as the phenomena labelled SVC so far in Chinese have turned out to be structures present in so-called "non-serializing" languages as well.

To obtain a clear picture is not only important for the description and analysis of Chinese itself, but also for typological studies aiming to compare languages with SVC. For example, parallels have been drawn between the so-called SVC in Mandarin Chinese and SVC in Niger-Congo languages (cf. Lefebvre 1991; Lord 1973; Li and Thompson 1974) without there being any effort to first check the coverage of the term in the two language families. As to be discussed in the following section, this lack of awareness of the numerous problems related to the label SVC has led scholars to equate phenomena which in fact are incommensurate.

#### 3. The term SVC in African linguistics (Niger-Congo languages)

While there exists a certain consensus that a SVC in Niger-Congo languages is not a coordinate structure, denotes a single (composite) event, presents one clausal domain (as evidenced by a unique tense/aspect value) and displays argument sharing (i.e., a common subject and/or object) (cf. Baker 1989; Déchaine 1993; Stewart 1996; Collins 1997, 2002), the exact coverage of the term SVC as well as its defining properties are nevertheless still under debate. A closer look reveals that here, as well, scholars further subdivide SVC into different "types" and thus allow for different constructions to be subsumed under one and the same label. This is the more surprising as in the discussion of SVC in Niger-Congo languages the authors are rather explicit about the structures proposed and do not – as in Chinese linguistics – mainly rely on different interpretations in order to motivate different types of SVC.

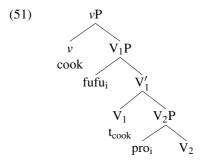
One of the main types of SVC acknowledged for Niger-Congo languages is the object sharing type, described a.o. by Collins (1997, 2002) for the Kwa language Ewe. This analysis is presented in some detail here, not only to illustrate the tests allowing to distinguish the SVC from other superficially similar constructions, but also because it will be referred to in the discussion of the Mandarin Chinese  $b\ddot{a}$ -construction in Section 4.1 below.

Taking up previous works by Déchaine (1986), Foley and Olson (1985) and Baker (1989), Collins (1997) chooses object sharing as the crucial criterion for the SVC, more precisely, sharing of the internal argument. It is sharing of the internal argument rather than object sharing because this allows to include cases such as (49) where *fufu* is both the object of *da* 'cook' and *du* 'eat' as well as cases such as (50) where 'child' is the object of chase and the unique, and for that matter, internal argument of *dzo* 'leave':

- (49) Wo da fufu du.
  3PL cook fufu eat
  'They cooked fufu and ate it.' (Collins 1997: 461; (3))
  (N.B. Collins' translation is not meant to imply a coordinate structure for (49).)
- (50) Me nya devi-ε dzo.
  1sG chase child leave
  'I chased the child away.' (Collins 1997: 461; (1))

The structure Collins (1997: 491) proposes is given in (51) where  $V_1$  selects  $V_2P$  as its complement and where the (covert) internal argument of  $V_2$  is coreferent with that of  $V_1$ . More precisely, the object of the first verb controls the empty category in the specifier position of  $V_2P$  (analyzed as *pro* by Collins

1997: 478).  $V_2P$  is analyzed as a kind of secondary predication, a proposal similar to that by Larson (1991).



As indicated in (51),  $V_1$  raises to small v.

The control structure in (51) correctly predicts the unacceptability of an overt pronoun following the second verb:

(52) *Wo-a da fufu du* -(\**i*). they-FUT cook fufu eat it 'They will cook fufu and eat it.' (= Collins 1997: 480, (60b))

Furthermore, Collins provides evidence for the distinction between the SVC in (53) and coordinate structures in Ewe: whereas in the SVC the future is marked only on the first verb (cf. 53b)), in a coordinate structure it must appear in front of each verb (cf. (54)):

(53)	a.	Me fo kad $\varepsilon gb\varepsilon$ gba.					
		I hit lamp break					
		'I hit the lamp and broke it.' (= Collins 1997: 463, (7))					
	b.	Me a fo kadɛgbɛ gba.					
		I FUTURE hit lamp break					
	'I will hit the lamp and break it.' <sup>26</sup> (= Collins 1997: 463, (9						
(54)	Me	a fo kadɛgbɛ *(a) gba (yɛme) tsimini.					
	Ι	FUT hit lamp FUT break its glass					
	'I w	ill hit the lamp and break its glass.' (= Collins 1997: 463, (10))					

(54) does not involve argument sharing. Hence, it is not a SVC, but a case of *parataxis* or *covert coordination* (cf. Baker 1989) and needs future marking on both verbs.<sup>27</sup>

<sup>26.</sup> Collins (1997) does not give any translation for (53b) nor for (54).

<sup>27.</sup> The presence of the future markers shows that what is coordinated here are IPs or I-bars rather than VPs or V-bars. Collins points out that Ewe does not allow covert coordination of VPs

Collins (2002) extends this analysis to verbal compounds in ‡Hoan (cf. (55)) for which he posits an object sharing SVC as underlying structure:

- (55) a. Ma a- q||hu |'o djo ki kx'u na.
  1SG PROG pour put.in water PART pot in 'I am pouring water into the pot.' (Collins 2002: 1, (1))
  b. [<sub>vP</sub> DP [<sub>v'</sub> [<sub>v</sub> pour [<sub>v</sub> put.in v] [<sub>vP1</sub> DP<sub>i</sub> [<sub>V1'</sub> t<sub>pour</sub> [<sub>vP2</sub> PRO<sub>i</sub>
  - [<sub>V2'</sub> t<sub>put.in</sub> [<sub>PP</sub> pot in]]]]]

(55a) is derived by adjoining both  $V_1$  and  $V_2$  (in that order) to the light verb v. Note that Collins (p. 10) here assumes "tucking in" à la Richards (1997).<sup>28</sup>

The difference between a SVC language such as Ewe where only  $V_1$  moves to v (cf. (51) above) and  $V_2$  remains in situ, on the one hand, and a SVC language such as  $\ddagger$ Hoan with verbal compounds resulting from the movement of both verbs, on the other, is explained by the general requirement for verbs in  $\ddagger$ Hoan to adjoin to v. (p. 9), a requirement absent from the syntax of Ewe.

The analysis of ‡Hoan verbal compounds as underlying SVCs makes it necessary for Collins (2002: 9) to revise the serialization parameter in (56) and to replace it by (57). While English, French and Swahili have a negative setting for (57), Ewe, Yoruba, ‡Hoan, and Chinese are said to have a positive setting.

- (56) Infl (tense) can license multiple Vs. (Collins 1997)
- (57) The light verb v can license multiple Vs. (Collins 2002: 9, (24))

If we now turn to the list of structures labelled SVC in Chinese (cf. Section 2.1 above), we state that the structures proposed by Collins in (51) and (55b) for an object sharing SVC do not figure among the SVC types established for modern Mandarin.

Baker and Stewart (2002) argue for the need to refine the classification of SVCs. They distinguish between resultative, purposive and consequential SVCs. (Examples given below are from the Kwa language Èdó.)

or V-bars, because otherwise a covert coordination with only one future marker should be possible.

Collins (2002: 13, (38)) lists the following generalizations needed to derive the correct word order for verbal compounds in <sup>‡</sup>Hoan:

a. Verbs always adjoin to the left.

b. A verb cannot adjoin to another verb. Rather, a verb must adjoin to a functional head (such as v, T, or C.).

c. The trace of a verb does not block movement.

d. A verb always adjoins as close as possible to v (Local Move).

(58) Resultative SVC *Òzó ghá gbè <u>è</u>wé* [<sub>VP</sub> wù].
Ozo FUT hit goat die
'Ozo will strike the goat dead.' (Baker and Stewart 2002: 2, (1a))

A resultative SVC describes a single event where  $V_2$  (an unaccusative verb) denotes the result of the action expressed by  $V_1$ .  $VP_2$ , the complement of  $V_1$ , does not contain any overt or covert argument (i.e., the internal argument sharing leading to the interpretation of the matrix object as theme is not encoded syntactically via an empty category.)

(59) Purposive SVC  $\partial z \delta [T'] gh a [VoiceP t_{OZO} mi en [AspP [AspP1[vP[VP tV] OZO FUT find]]]] [AspP2 Op lé [vP[VP2 tV]].<sup>29</sup>$ yam cook'Ozo will find yams to cook (and do so).' (Baker and Stewart (2002: 3, (3a))

In the purposive SVC, the transitive  $V_2$  is embedded in an AspP and object sharing is mediated via the presence of an operator in Spec, AspP<sub>2</sub>. AspP<sub>2</sub> itself is adjoined to AspP<sub>1</sub>. Baker and Stewart note that while the action expressed by  $V_2$  is understood as asserted in the Èdó example above, this is not necessarily the case in purposive SVCs in other languages such as Nupe.

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(60) Consequential SVC

\partial z \delta [T' gh a [VoiceP t_{OZO} gb e [AspP [vP [vP1 [VP1 e e w e t_V]]])

Ozo FUT hit goat

[vP2 khien [vP2 pro t_V]].

sell

'Ozo will kill the goat and sell it.' (Baker and Stewart 2002: 2, (1a))
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The consequential SVC finally describes a composite event with two distinct subevents. Internal argument sharing is mediated by a *pro* present in the VP headed by (the transitive)  $V_2$  and dominated by  $vP_2$ . This  $vP_2$  in turn is adjoined to  $vP_1$ .

If we now want to check whether these structures can be found among those listed as SVC in Chinese, we must once again admit defeat. Though on the surface and from an interpretative point of view, Baker and Stewart's purposive SVC seems to correspond to a Chinese purpose clause such as (61) (with a

<sup>29.</sup> Concerning the movement of V1 and V2 in Examples (59) and (60), only the original position and the landing site are indicated, but not the intermediate steps.

covert object in addition to the covert subject), the associated structures are completely different:

(61)  $T\bar{a}_i \ zh\breve{u} \ t\bar{a}ng_j \ [CP \ Op_j \ [IP \ pro_i \ h\bar{e} \ t_j \ ].$  (=(13)) 3SG cook soup drink 'He cooked soup to drink.'

In the Chinese purpose clause structure (61) the CP into which  $V_2$  is embedded is structurally a complement of  $V_1$ , and not adjoined to a projection containing  $V_1$ . Given the fact that in Chinese constituents appearing to the right of the main verb on the surface must occupy a position lower than the verb (cf. Huang 1982 and subsequent work), the adjunction scenario proposed by Baker and Stewart (2002) for purposive and consequential SVCs is completely excluded for Chinese.

Unlike Collins (1997, 2002) and Baker and Stewart (2002), Law and Veenstra (1992) do not take as a starting point a Niger-Congo language, but base themselves on Jamaican Creole. They propose a distinction between *theme serials* and *instrumental serials*. A theme serial (cf. (62a)) is roughly equivalent to the internal argument sharing SVC à la Collins, modulo the difference that object sharing is mediated by an operator (adjoined to the second predicate).

- (62) a.  $[_{VP} [_{V'} [_{V'} V_1 NP_i ] [_{VP} Op_i [_{VP} PRO [_{V'} V_2 t_i ]]]] (Law and Veenstra 1992: 186; (3))$ 
  - b. Im tek stuon fling ina di waata. he take stone throw in-LOC the water 'He threw the stone into the water.' (Law and Veenstra 1992: 191; (13a))

An instrumental serial, by contrast, lacks an empty category (wh trace) following V<sub>2</sub>, hence also the empty operator. The structure proposed for an instrumental serial is as follows:

- (63) a.  $[_{VP} [_{V'}[_{V'} V_1 NP] ]_{VP} PRO [_{V'} V_2 ]]]]$  (Law and Veenstra 1992: 187; (4))
  - b. *Im tek naif alter di hog.* he take knife alter the hog 'He castrated the hog with a knife.'

As pointed out by Law and Veenstra (1992), in both cases, the unique event interpretation typical of SVC is obtained by limiting the size of the projection containing  $V_2$  to VP (rather than IP or CP).

If we now compare the Jamaican Creole examples with Chinese, sentence (63b) looks very much like the Chinese examples analyzed as adjunct clause structures (cf. (64) below). Similarly, the theme serial example can be easily

transposed into the Chinese  $b\ddot{a}$  construction (cf. (65)), although again the associated structure is completely different (see Section 4 below for a detailed discussion). Although I do not have any knowledge about the syntax of Jamaican Creole, the structure proposed for its so-called instrument serial nevertheless strikes me as rather surprising, the more so as Law and Veenstra (1992: 192) themselves observe the optionality of *tek naif* 'take knife' in (63b), a property to be expected from an adjunct. Note in this context that Law and Veenstra (1992: 187) admit that they "are not in a position to fully defend this structure". Furthermore, they explicitly acknowledge the lack of an *a priori* definition of SVC and declare to "put the definition of SVCs aside and [to] use the term for convenience to refer to the surface sequence of the form 'NP V NP V' [...]." (p. 191).

- (64)  $T\bar{a}_i \left[ {}_{\nu P} \left[ {}_{adjunct \ clause} PRO_i & n\acute{a} & d\bar{a}o \right] \left[ {}_{\nu P} & qi\grave{e} \cdot le & (=(47c)) \right] 3SG & hold knife cut-PERF$ rou]]. meat'He cut the meat taking a knife.'
- (65) Tā bă shítou rēng zài shuĭ li.
  3SG BA stone throw be.at water inside 'He threw the stone into the water.'

This brief discussion once again demonstrates the vagueness of the term SVC and the possibility of associating different structures with it. We thus obtain the situation illustrated above where structures from Chinese and Jamaican Creole are not analyzed in the same way, although they might turn out to be identical (although not instantiating SVCs).

Last, but not least, Déchaine (1993: 800) in her overwiew article proposes a "bivalent" VP structure for SVC where one VP is adjoined to another, an approach which – as we have seen above – is equally adopted by Baker and Stewart (2002). Whether such a bivalent VP is headed by  $V_1$  or  $V_2$  may differ from one language to the other: while in Haitian SVC,  $V_1$  is the head, it is  $V_2$  in Ìgbo. However, headedness may also vary within the same language as, e.g., in the case of Yorùbá. Examining in detail the two Kwa languages Ìgbo and Yorùbá as well as Haitian (with a Kwa substrate) Déchaine furthermore emphasizes the differences observed in the degree to which so-called "serializing" languages make use of SVC and concludes to the unlikeliness that SVCs constitute a unitary phenomenon licensed by a single parameter.

Evidently, it is impossible here to do justice to the abundant literature on SVC in Niger-Congo languages and elsewhere and to the richness of the detailed language descriptions used as evidence for a certain conception of SVC. However, even a limited overview as the one given here should suffice to show that we face a situation similar to the one encountered in Chinese linguistics: when confronted with the term SVC, we do not know what structure is referred to among the different conceptions of SVC prevalent in the studies on Niger-Congo languages (modulo the minimal consensus on SVC stated above), and this despite the fact that the authors are rather explicit about the syntactic structure they postulate for (each type of) SVC.

This problem linked to the indeterminacy of the term SVC increases exponentially in crosslinguistic comparison when, e.g., SVC in Chinese are to be compared with the SVC in Niger-Congo languages. In such a case, there is no way of knowing to what extent the phenomena covered by the term SVC in each language overlap, nor whether they overlap at all. Coordinate structures are a good example here: while there is a consensus that they do not count as SVC in Niger-Congo languages, they are included under SVC in Chinese. This demonstrates that the terms SVC as they are used in Chinese and African linguistics, respectively, are not commensurate. Things get even worse in typological studies where so-called "serializing" languages are confronted with so-called "non-serializing" ones and where the crosslinguistic comparison relies on the illusory assumption that in each case we deal with a well-defined homogeneous group.

#### 4. The importance of SVCs in diachronic and typological studies

Unfortunately, the conceptual difference between SVCs "à la chinoise" and SVCs "à l'africaine" and the heterogeneity of the phenomena subsumed under each type is hardly paid any attention in the literature. On the contrary, in grammaticalization studies reference is often made from SVCs in Chinese to those in Niger-Congo languages and vice versa, as though one and the same phenomenon was involved (cf. Lord 1973; Lefebvre 1991).<sup>30</sup> Furthermore, important theoretical conclusions in terms of a typologically relevant "serialization parameter" (cf. a.o. Larson 1991; Collins 1997, 2002; Den Dikken and Sybesma 1998; Stewart 2001), distinguishing so-called "serializing" from so-called "non-serializing" languages have been drawn on the basis of incommensurable phenomena. (But cf. Déchaine (1993) and Law and Veenstra (1992) who question the feasibility of a serialization parameter.) Taking the *bă* construction in modern Mandarin as example, this section discusses the farreach-

<sup>30.</sup> While it is true that in both language language families prepositions evolved from verbs, thus contrasting with e.g., Indo-European languages where prepositions are derived from locative case-form nouns, SVCs in Chinese have been shown to cover quite a different spectrum of phenomena from SVC in Niger-Congo languages. Thus, when Lord (1973: 292) states that "Mandarin Chinese has serial verb constructions analogous to those in Kwa", there is no way of knowing what structure she is referring to.

ing consequences for both diachronic and typological studies arising from the indeterminacy of the term SVC and shows them to go well beyond a simple (mis)labelling issue.

#### 4.1. The role of SVCs in diachronic studies

SVCs play a crucial role in diachronic syntax, because they are claimed to be the source structure *par excellence* for numerous grammaticalization phenomena in Chinese (cf. a.o. Zhu, Minche 1957; Wang, Li 1958; Mei 1981; Li and Thompson 1974b; Peyraube 1996; Simpson and Wu 2002; Xing 2003). One of the most extensively discussed cases is the origin of the *bă* construction in Modern Mandarin:

(66)	a.	<i>Tā bă shū rēng-le.</i> 3SG BA book throw:away-PERF 'He threw the book(s) away.'
	b.	Tārēng-leshūle.3SGthrow:away-PERFbookPART'He threw a book/books away.'
(67)	a.	<i>Tāmen bă Zhāngsān / lǎohu gǎn-zǒu-le.</i> 3PL BA Zhangsan / tiger expel-leave-PERF 'They chased Zhangsan/the tiger away.'
	b.	

While the postverbal position is the default position for the object DP (cf. (66b), (67b)), in the  $b\ddot{a}$ -construction (cf. (66a), 67a), the object DP appears to the left of the verb and is preceded by  $b\ddot{a}$ .<sup>31</sup>

<sup>31.</sup> It goes beyond the scope of this article to discuss the reaons for this optionality. Suffice it to point out that the constraints holding in the bă-construction lead to the interpretation of bare nouns as definite. Cf. Li (2006) and references therein for an extensive overview of the relevant data and the range of analyses proposed for the bă-construction.

As far as I can see, the possible co-existence of the  $b\ddot{a}$  construction with a corresponding structure where the object ocupies the postverbal position and the acceptability of simple verbs in the  $b\ddot{a}$  construction (cf. (66a)) make it impossible to apply Collins' (2002) analysis of  $\pm$ Hoan verbal compounds here, contrary to a reviewer's suggestion. For this would require Chinese to be a language where at the same time all verbs have to undergo movement to v (deriving (67b)) and where only V1, or rather  $b\breve{a}$ , moves to v (deriving (66b)). Also note that

Traditionally,  $b\ddot{a}$  is assigned prepositional status and said to have originated from a 'take' verb such as  $b\ddot{a}$  'seize, hold' or *jiāng* 'seize, hold' occurring in an SVC, thus representing one of the many cases of V-to-P reanalysis in Chinese:<sup>32</sup>

- (68) Sūnzi jiāng yī-yā sī yòng.
  Sunzi take 1-duck privately use
  'Sunzi grabbed a duck and used it for himself.'
  (Zhang Zhuo, *Chao ye qian zai*; 8th c., from Zhu, Minche 1957: 18)
- (69) Qīng jiāng yù-zhàng qiāo huā-piàn.
  lightly take jade-stick tap flower-petal
  'Taking a piece of jade, she lightly tapped on the flower petals.'
  (Zhang Hu: Gong zi xing, 9th c., from Wang, Li 1958: Ch. 47: 539)

Like the synchronic studies on SVC, diachronic studies do not indicate which one among the numerous structures subsumed under the label SVC they refer to, but in general content themselves with providing the purely linear sequence 'V1 NP V2 (NP)'.<sup>33</sup>

All researchers agree, following Zhu (1957), that the source structure for the modern  $b\ddot{a}$  construction is the object sharing pattern in (68), the instrumental pattern with  $b\ddot{a}$  as illustrated in (69) being lost in Modern Mandarin. Accordingly, as argued for in detail in Whitman and Paul (2005), two different structures must be postulated for (68) and (69) in order to account for the presence of object sharing in (68) and its absence in (69d). While (68) is to be analyzed in terms of an object sharing SVC à la Collins (1997) (cf. (70)), (71) illustrates an instrumental adjunct structure (cf. (71):

(70)  $\begin{bmatrix} v_{P} & ji\bar{a}ng & [v_{P1} & [p_{P} & y\bar{r}-y\bar{a}]_{i} & [v_{1'} & t_{jiang} & [v_{P2} & s\bar{t} & [v_{P2} & PRO_{i} \\ take & 1-duck & privately \\ y \hat{o}ng] \end{bmatrix} \end{bmatrix}$ use 'grab a duck and use it for himself.'

 $b\check{a}$  does not assign a theta-role to the NP in its complement, another difference with respect to SVC, irrespective of their surface realization (as a 'V1 NP V2' sequence in Ewe or as a 'V1–V2' compound in  $\pm$ Hoan).

<sup>32.</sup> Specialists in Chinese historical syntax generally treat bă and jiāng together, along with another 'take' verb, i.e., *chi* 'seize, hold' (Wang, Li 1958: Ch. 47; Zhu, Minche 1957; Peyraube 1996: 168).

<sup>33.</sup> If traditional analyses indicate any hierarchy between bă and the second verb at all, they assume it to be the same in both cases, (68) and (69). Peyraube (1985: 208) and Cui (1984) e.g., postulate a coordinate structure, while Zhu (1957) and Wang, Li (1958/88: Ch. 47) suggest a structure where V1 modifies V2, i.e., an adjunct structure. Likewise, Audrey Li (2006: 411) simply states that the source structure for the modern bă construction is a SVC, without indicating what structure she is referring to.

# (71) [vP qīng [vP [adjunct clause PRO jiāng yù-zhàng] [vP qiāo lightly take jade-stick tap [vPz t<sub>qiao</sub> huā-piàn]]] flower-petal 'taking a piece of jade, lightly tap on the flower petals'

In (70) *jiāng* 'seize, hold' selects the second VP headed by *yòng* 'use' as its complement. The shared object DP  $y\bar{i}$ - $y\bar{a}$  'a duck' is merged in the specifier of the VP headed by *jiāng* and controls *PRO* in the complement VP. In (71), by contrast, there is no control relation between the object of the verb in the adjoined VP<sub>1</sub> and the object of VP<sub>2</sub>.

Importantly, *jiāng* occupies two different positions in (70) vs. (71): in the object sharing SVC (70), *jiāng* functions as the main verb, whereas in the adjunct structure (71), *jiāng* is contained in the adjunct clause which modifies the main VP, headed by *qiāo* 'tap'. This difference can be visualized using a maximal VP structure (72), where the main verb in an object sharing SVC is further modified by an adjunct clause. The main verb position occupied by *jiāng* in (70) corresponds to the V<sub>2</sub> position in (72), while the adjoined position occupied by *jiāng* in (71) corresponds to V<sub>1</sub> in (72):

## (72) $\begin{bmatrix} v_{P} & [adjunct clause PRO VP_{1}] & [v_{P} V_{2} & [VP_{2} DP_{i}] & [v_{V} V_{2} & [VP_{3} PRO_{i}] & [v_{V} V_{3} XP] \end{bmatrix} \end{bmatrix}$

If we now subject (72) to Whitman's (2000) conservancy of structure constraint according to which reanalysis must preserve hierarchical c-command relations and can only change categorial features and eliminate unmotivated structure, we obtain the following predictions. Verbs in the VP<sub>1</sub> and VP<sub>3</sub> positions may undergo V-to-P reanalysis, because these may serve as positions for PPs. The main verb V<sub>2</sub> having raised to v, on the other hand, is predicted not to be reanalyzable as a preposition, because the resultant structure would involve a change of c-command relations and be ill-formed: a preposition cannot support tense, nor is it selected by v. Given the general assumption (following Zhu 1957) that the source for the modern  $b\vec{a}$  construction are sentences such as (68) which have been identified as an object sharing SVC with *jiāng* as the main verb (V<sub>2</sub> in (72)), this implies that  $b\vec{a}$  cannot have been reanalyzed as a preposition, contrary to traditional views.

While this result may be surprising at first sight, it ties in with the growing consensus that  $b\ddot{a}$  is not a preposition, but should be viewed as the head of a (functional) projection above vP (cf. Sybesma 1992, 1999; Zou 1993; Li 2006; Paul 2002b). On this view,  $b\ddot{a}$  continues to take the projection of the verb to its right as its complement and thus maintains previous hierarchical relations. The correctness of this analysis is clearly shown by the possibility of conjoining two occurrences of preverbal object plus VP under *bă* (cf. Wu 1982: 434):

(73)  $T\bar{a}$  zuì hào bà  $[_{\nu P}[_{\nu P} \ \bar{A}ki\bar{u} \ jièshào gěi Lĭsì]$ 1SG most good BA Akiu introduce to Lisi  $[_{\nu P} \ Wángwũ \ jièshào gěi Lǎolǐ]].$ Wangwu introduce to Laoli 'He'd better introduce Zhangsan to Lisi and Wangwu to Laoli.'

This fact would be difficult to explain if  $b\ddot{a}$  and the immediately following NP formed a constituent, as the prepositional analysis of  $b\ddot{a}$  holds. The behavior of  $b\ddot{a}$  in (73) contrasts sharply with (74), where a true PP is involved; (74) is totally ungrammatical without the second occurrence of the preposition  $du\dot{a}$  'towards'.

(For further arguments in favor of *bă* as a higher verbal head in modern Mandarin, cf. Whitman and Paul 2005.)

In contrast to V<sub>2</sub> occupying the main verb position in an extended VP projection (72), verbs in either V<sub>1</sub> or V<sub>3</sub> position may be reanalyzed as prepositions, for reanalysis in these positions does not induce any change in the basic structure of the clause. V-to-P reanalyses in the adjunct (V<sub>1</sub>) position are especially numerous: *cóng* 'follow > from', *gēn* 'accompany > with', *duì* 'face > towards' etc.:

(75)  $W \check{o} [_{\nu P} g \bar{a} n g [_{\nu P} [_{PP} c \acute{o} n g n \acute{o} n g c \bar{u} n] [_{\nu P} hu \acute{i} - l \acute{a} i]]].$ 1SG just from village return-come 'I have just come back from the village.' (Lü 2000: 130)

The basic configuration of the example (75) from Modern Mandarin, where  $c \delta n g$  heads an adjunct projection preceding the main verb, is already attested in the *Zuozhuan* (cf. (76)):

(76) Cóng tái-shang tán rén. from platform-upon shoot people 'He shot people from up on the platform.' (Zuozhuan: Xuangong 2; 5th c.–3rd c. BC).

The *Zuozhuan* also provides the source structure for V-to-P reanalysis where the verb *cóng* 'follow, pursue' is contained in an adjunct clause:

(77)[vP [adj.clause PRO Xià DP zhūhóu dàifū] zhī summer feudal.lord SUB high.official cóng Jìn hóu]  $[_{vP} f a$ Q(n)].follow Jin duke attack Qin 'In summer, the high officials of the feudal lords, following the duke of Jin, attacked Qin.' (Zuozhuan: Xianggong 14; 5th c.–3rd c. BC)

This section has demonstrated that once we become aware of the current indeterminacy of the term SVC and give it an exact definition (e.g., as an object sharing structure à la Collins), we are led to two surprising conclusions. First, contrary to general assumptions, object sharing SVCs are *not* a privileged source structure for V-to-P reanalysis; instead, the primary historical source for prepositions derived from verbs in Chinese are adjunct clauses (V1 in (72)) (cf. Whitman and Paul 2005). Second, concerning the possible changes affecting an object sharing SVC, the main verb (V2 in (72)) is precisely excluded from V-to-P reanalysis, due to Whitman's (2000) conservancy of structure constraint. Consequently,  $b\breve{a}$  – deriving from this main verb position – cannot be a preposition, but has the status of a higher verbal head. These results, which can only be obtained by adopting a rigorous definition of the term SVC, demonstrate that meaningful statements about language change presuppose a precise analysis of both the input and the output structure.

#### 4.2. SVCs in typology: Example of a "serialization parameter"

In general, SVCs are said to be a typical property of languages lacking verbal inflectional morphology (such as, e.g., Chinese). However, a closer look at the languages with and without SVCs reveals this at first sight plausible generalisation to be wrong. English, e.g., is troublesome in this respect, because "although" it does not show any person/number agreement on the verb (the third person singular -*s* being construable as a present tense marker), it does not have SVCs (but cf. Pullum 1990). In Yorùbá, by contrast, mood/tense is marked on the verb (cf. Stahlke 1970), and "nevertheless" it allows SVCs. Likewise, the Misumalpan languages Miskitu and Sumu have SVCs (cf. Salamanca 1988; Hale 1991), but display a rich inflectional morphology: the verb is not only marked for tense and person, but also for *proximate* (same subject) vs. *obviative* (different subject).

For Den Dikken and Sybesma (1998), the basic distinction between languages with and without SVC is that "[...] serialising languages differ from non-serialising ones such as English in their inability to spell out the *v*-V combination as one single lexical element [...]" (p. 1), i.e., in serializing languages V does not raise to *v*. They then introduce – without further comment – yet another definition of SVC as sequences 'V<sub>1</sub> NP V<sub>2</sub>' where V<sub>1</sub> does *not* assign a theta-role to NP. Under this definition, the object/internal argument sharing SVC from Ewe (cf. (49), (50)) – though representing one of the SVC core cases in Niger-Congo languages – would not count as SVC, the shared argument NP clearly receiving a theta-role from the first verb. With this caveat in mind, let us proceed to their next claim, namely that the modern Mandarin *bă*-construction (cf. 78) is an SVC, with *bă* in *v*:

(78) Wõ bă Zhāngsān găn-zŏu-le.
1SG BA Zhangsan expel-away-PERF<sup>34</sup>
'I chased Zhangsan away.' (Den Dikken and Sybesma (1998), (4b); their glosses)

Furthermore, they postulate the following (interrelated) assumptions concerning the *bă*-construction:

- (79) a. The  $b\ddot{a}$ -construction is only possible with a complex verb.
  - b. One component of this complex verb is non-verbal (noted as 'X' in (80a-b)).
  - c. This non-verbal component functions as the predicate of a small clause (SC), with the NP following *bă* as its subject.

Accordingly, (78) is assigned the structure and derivation in (80a–b):

The "dummy" element  $b\breve{a}$  is inserted into v and the NP raises to Spec, FP between v and V:

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(i) T\bar{a} z \check{o}u-le
3SG leave-PERF
'She left.'
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<sup>34.</sup> The item  $z \delta u$  glossed as 'away' by den Dikken and Sybesma (1998) in fact is nothing else but the verb  $z \delta u$  'leave', whose verbal status is uncontested (also cf. (84) below):

 <sup>(</sup>ii) Nĭ shénmeshíhou yào zǒu?
 2sG when want leave
 'When do you want to leave?'

(80) b. 
$$\begin{bmatrix} VP & V & \delta & FP & Zh\bar{a}ngs\bar{a}n_i & F' & F_{asp} & VP & g\bar{a}n & SC & NP & t_i \end{bmatrix}$$
  
BA Zhangsan expel  
 $\begin{bmatrix} X & z\bar{o}u \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ away$   
'chase Zhangsan away'

(80b) is the structure of a SVC proposed by den Dikken and Sybesma (1998): the verb does not raise to v and v is therefore lexicalized by an independent morpheme, in this case  $b\breve{a}$ , a process said to be typical of serializing languages. However, this analysis of the  $b\breve{a}$  construction and the assumptions (79a–c) underlying it are not correct.

First of all, the  $b\ddot{a}$ -construction is perfectly acceptable with *simple* verbs and not at all limited to complex verbs as claimed by Den Dikken and Sybesma (also cf. (66a) above):<sup>35</sup>

- (81) Tā bă Zhāngsān piàn-le.
   3SG BA Zhangsan cheat-PERF
   'She cheated Zhangsan.'
- (82) Tā bă péngzi chāi-le.
  3SG BA shack demolish-PERF
  'He demolished the shack.' (Li, Linding 1987: 31)

Accordingly, there is no non-verbal element X available to function as the predicate of the small clause, hence no reason to postulate a small clause at all.

Furthermore, the statement in (79b) that one component of the complex verb is non-verbal is equally wrong. Resultative verb compounds such as  $g\check{a}n$ - $z\check{o}u$  'chase-leave' = 'chase away',  $ch\bar{i}$ -wán 'eat-finish' = 'eat up', etc. are in general analyzed as consisting of two *verbal* elements, each maintaining its thematical grid (cf., among others, Chao 1968: Section 6.6.2–3; Li and Thompson 1981, 3.2.3; Yafei Li 1993). Examples (84) and (86) below demonstrate that the second component in a verb compound can clearly function as a verb on its own:

- (83)  $W \check{o} b \check{a} Zh \check{a} ngs \check{a} n [_{V^{\circ}} g \check{a} n z \check{o} u]$ -le. 1SG BA Zhangsan expel-leave-PERF 'I chased Zhangsan away.' (=(78) above, with my glosses)
- (84) Rénjiā găn wõ le, wõ néng bù zõu ma?
  people expel 1SG PART 1SG can NEG leave PART
  'When people drive me away, how can I not leave?' (Meng Cong 1987: 287)

<sup>35.</sup> Examples such as (81) and (82) are easy to find in any book on Chinese grammar.

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(85)	Τā	kàn-wán-le	/	chī-wán-le	/	fùxí-wán-le.
	3sg	read finish-PERF	/	eat finish-PERF	/	revise-finish-PERF
	'He l					

(86) Wõ yī-huìr jiù wán shì.
1SG 1-moment then finish matter
'I'll have finished in a moment.'

Once the verbal status of the second element in verbal compounds ' $V_1 - V_2$ ' acknowledged, Den Dikken and Sybesma's (1998) postulate of a small clause (with the alleged non-verbal element X as predicate) is further invalidated.

Last, but not least, it is not correct to locate  $b\breve{a}$  in small v and the verb in VP (an analysis equally rejected by Audrey Li 2006). Instead, the verb itself raises to v (and eventually on to Asp), as evidenced by the possibility of adjoining manner and other VP-level adverbs below  $b\breve{a}$ .<sup>36</sup> The higher verbal head  $b\breve{a}$  must therefore select a vP (or AspP) as complement (cf. Paul 2002b; Whitman and Paul 2005):

- (87) Tā [vP bă [BaP Zhāngsān t<sub>ba</sub> [AspP hĕnxīnde [AspP 3SG BA Zhangsan cruel-hearted pāoqì-le [vP [vP tv t<sub>Zhangsan</sub>]] abandon-PERF
  'She heartlessly left Zhangsan.' (slightly changed example from Tang 1990: 145; (111); bracketing mine)
- (88) Nĭ bă zhèi-běn cídiăn [vP zài [vP jiègĕi wŏ 2SG BA this-CL dictionary again lend 1SG sān-tiān]].
  3-day 'Lend me this dictionary for another three days.'

The examples (87)–(88) also demonstrate that the  $b\ddot{a}$  construction in Modern Mandarin does not instantiate an object sharing SVC.  $B\ddot{a}$  no longer assigns a thematic role to a complement DP; instead, the DP in the specifier of  $b\ddot{a}$ , e.g., *Zhangsan* in (87), moves to that position. Furthermore, the distribution of VP-level adverbs show that  $b\ddot{a}$  originates in a head position higher than

<sup>36.</sup> Accordingly, so-called VP-level adverbs in fact adjoin to vP or AspP (also cf. Lin 2001: 258).

lexical verbs (i.e., higher than vP or AspP, respectively), from where it moves on to (the highest) v.<sup>37</sup>

As demonstrated in detail above, Den Dikken and Sybesma's (1998) analysis of the  $b\ddot{a}$  construction is not viable; in particular, the verb does raise to vhere, as elsewhere in the syntax of Chinese (cf. a.o. Huang 1991, 1992). Consequently, the  $b\ddot{a}$  construction does not comply with Den Dikken and Sybesma's (1998) definition of SVC, for which the lack of V-to-v movement is crucial. At the same time, this also sheds doubt on the general typological difference between serializing and non-serializing languages which they derive from their incorrect analysis of the  $b\ddot{a}$  construction: while serializing languages are said to be characterized by the lack of V-to-v movement, correlated with the existence of an independent 'take' element able to lexicalize v, this is claimed not to be the case for non-serializing languages where V raises to v.

To conclude, Den Dikken and Sybesma (1998) once again illustrates the rather arbitrary content which can be ascribed to the term SVC, due to the coexistence of diverging conceptions. Their article equally shows how the failure to realize the problematic status of SVC may give rise to questionable typological generalizations.<sup>38</sup>

#### 5. Conclusion

Examining in detail the coverage of the term *serial verb construction* in Chinese linguistics, I have argued that in order to talk of a *construction*, a precise structural analysis and a predictable set of formal properties associated with

(i)  $[BaP [Ba' b\breve{a} [vP NP [v' [V [vP tV XP]]]]]]$ 

 $B\check{a}$  as the head of BaP stays in situ and takes a vP complement with the direct object in its specifier; on this view, adverbs to the right of  $b\check{a}$  such as  $h\check{e}nx\bar{n}de$  'heartless' in (87) must be adjoined to v', a rather implausible assumption.

- 38. The same lack of awareness with respect to the problematic character of the term SVC can also be observed in studies on grammaticalization. For instance, Roberts and Roussou (2003) postulate (i) as the approximate structure for a SVC:
  - (i) [CP C [TP T [VP1 V1 [VP2 V2 ]]]] (= Roberts and Roussou 2003: 126 (90a))

They state that an SVC involves two (or more) VPs expressing a single event, evoke the possibility for V1 and V2 to be in a complementation relation or a paratactic relation, and refer to Baker (1989); Lefebvre (1991); Collins (1993); Déchaine (1993); and Den Dikken and Sybesma (1998) for further details. Apparently, they are unaware that the cited references postulate different and sometimes even opposing structures for SVCs and can therefore not help fleshing out the details left open in structure (i).

<sup>37.</sup> The structure assigned to the Modern Mandarin *bă* construction by Whitman and Paul (2005) (cf. (87)) is thus different from that proposed by Li, Y.A. (2006: 412):

that structure must be provided. I have chosen the SVC because it plays quite an important role in Chinese linguistics and elsewhere, especially in diachronic studies where it is presented as the privileged site for grammaticalization processes. Likewise, in synchronic linguistics, the SVC is appealed to as a kind of *deus ex machina* whenever a sentence containing two or more verbs is difficult to analyze.

Against this common trend, I have argued that the SVC, as it is currently understood, has no theoretical status in the grammar of Mandarin Chinese i.e., it does not represent a unique construction associated with a precise structure and a predictable set of syntactic and semantic properties (though there are evidently sentences containing more than one verb in Chinese). Instead, the phenomena subsumed under the one label SVC in fact turn out to represent separate constructions with completely different properties. The term SVC should therefore be abandoned in Chinese linguistics, at least for the structures subsumed so far under this label.

In the studies of Niger-Congo languages, the so-called SVC are also a much discussed phenomenon. Even though the consensus here is somewhat greater as to which structure should be subsumed under the term SVC and which not, we nevertheless face a situation similar to that in Chinese linguistics. That is, when confronted with the term SVC, we do not know which construction is referred to. This problem linked to the indeterminacy of the term SVC increases exponentially in crosslinguistic comparison when, e.g., SVC in Chinese are compared with SVC in Niger-Congo languages. In such a case, it is not clear at all to what extent the phenomena covered by the term SVC in each language overlap, nor whether they overlap at all.

Unfortunately, this problematic status of SVC has not been paid any attention to in the literature. On the contrary, reference is made from SVCs in Chinese to those in Niger-Congo languages and vice versa as though one and the same phenomenon was involved (cf. Lefebvre 1991; Lord 1973; Collins 2002). Furthermore, important theoretical conclusions in terms of a typologically relevant "serialization parameter" (cf. Larson 1991; Den Dikken and Sybesma 1998; Stewart 2001, among others) distinguishing so-called "serializing" from so-called "non-serializing" languages have been drawn on the basis of incommensurable phenomena. Ultimately, it is hoped that a strict definition of the term SVC may lead to a more realistic appraisal of the dichotomy "serializing" vs. "non-serializing" languages and its place in typological studies.

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