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Encoding Motion Events in Mandarin and Italian: Theoretical Issues, Teaching Materials, and Implications for CFL/CSL Teaching

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Abstract:

The encoding of motion events shows significant cross-linguistic variation: Mandarin, a satellite-framed language, encodes path information in secondary elements, whereas Italian, a verb-framed language, lexicalizes path directly within verbal roots. This typological difference, rooted in Talmy (2000)'s framework, poses challenges for Italian-speaking learners in acquiring Mandarin's primary device for motion encoding, directional verbal complexes (DVCs). These constructions are sequences of verbal morphemes that encode multiple motion components simultaneously, including manner of motion, path, and perspective. In contrast, Italian strategies for motion encoding tend to emphasize trajectory or path over the manner of motion. Through an analysis of CFL (Chinese as a Foreign Language) textbooks and grammars used in three main Italian universities, this study identifies critical gaps, including insufficient explanations of the syntactic and-more notably-semantic constraints impacting DVC word order, object positioning, and aspectual marking. Findings indicate that a comparative, typologically aware approach - leveraging Italian constructions with similar functions such as syntagmatic verbs - could bridge these gaps, fostering a more accurate understanding of DVCs. The study recommends enhancing teaching materials to better represent the full syntactic and semantic range of DVCs, aiding learners in mastering the complexities of Chinese motion event encoding.

Keywords: Motion events, Directional verb complexes, Syntagmatic verbs, CFL teaching, CSL teaching, Teaching materials

1. Introduction¹

Chinese directional verb complexes (DVCs) represent a much debated topic in the literature, both from the perspective of theoretical and applied linguistics, and in the area of acquisition. Generally labelled as $q\bar{u}xiang b\bar{u}y\bar{u}$ 趋向补语 'directional (verb) complements' in the Sinophone literature (Liu et al. 2001), DVCs represent a sequence of two or three verbal morphemes which can occur in the simple variant, when a displacement verb (e.g., $p\bar{a}o$ 跑 'run', $tu\bar{u}$ 推 'push', $d\bar{a}$ 打 'hit, beat') is followed by an element of the closed-class directional verbs (e.g., jin 进 'enter', $ch\bar{u}$ 出 'exit') or one of the two deictic verbs *lái* 来 'come' and qu 去 'go', or in the complex variant when a combination of the latter two follows a displacement verb (e.g., $p\bar{a}o$ - $ch\bar{u}$ -*lái* 跑出来 'run-exit-hither').² At the semantic level, their meaning can be either literal when a displacement occurs from one place to another, or extended when the expression of a result or aspectual state is involved rather than physical movement, as in the case of the inceptive/inchoative state conveyed by *dong-qī-lái* 动起来 'move-rise-hither' which could be rendered as 'start moving' (Liu 1998: 378).

DVCs have sometimes been included among the broader category of resultative verb complexes, or "resultative verb compounds" in Li and Thompson's (1981) terminology, for they are argued to represent one of the several different types of results of the action or process conveyed by the first verbal morpheme of the sequence (*Ibidem*, 54-55; Zhang 2011:3). According to other scholars, however, the different syntactic and semantic behaviour of directional and resultative complexes point to a distinction between the two. These include the possibility for DVCs but not for resultative complexes to be separated by aspectual markers or eventual objects, and the specific temporal sequence characterizing the latter but not necessarily the former (Lin 2019).

From a cross-linguistic perspective, Chinese DVCs belong to constructions encoding motion events, which are described by Talmy (2000) as situations containing motion.³ As Talmy has shown, the way in which motion events are encoded across different languages varies importantly with respect to the lexicalization of the path component – the trajectory followed by the moving entity – either in the main verb or in another element referred to as a satellite (see § 2). This determines a bipartite distinction between verb-framed and satellite-framed languages (*Ibidem*), which in turn correlates with a different prominence of the manner in which motion occurs and a different size and composition of the path/motion inventory across languages (Slobin 2004). Mandarin has been argued to belong to the satellite-framed type, along with languages like English, while Romance languages, including Italian, are included among those using verb-framed strategies. However, more recent studies have shown that such distinctions are not always clear-cut and that languages can present – to different degrees – strategies belonging to both types, making it difficult to predict the behaviour of one language merely based on the Talmian typology (Slobin 2004; Beavers et al. 2010; Filipović and Ibarretxe-Antuñano 2015).

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²Here I follow Lamarre (2007) and Lin (2019) who translate the two deictic verbal morphemes as 'come' and 'go' respectively when they are used as the main verb of a clause, and as 'hither' and 'thither' respectively when they appear as the second or third element in a DVC construction.

³ Talmy (2000) includes both stationary and dynamic situations among motion events. However, this paper only considers events which entail a change of location of the entity involved in the motion, in line with most of the studies on Chinese DVCs. Mandarin, in fact, tends to encode motion and stationary location through different means, the former involving mostly directional complexes, and the latter relying on PPs (Li and Thompson 1981).

Needless to say, the aforementioned issues represent thorny aspects not only from a theoretical or descriptive point of view, but also from the language teaching and learning perspective. As Zhang (2011) points out, the most challenging aspects for learners of Chinese include not only the complexity of these linguistic constructions from the morpho-syntactic and semantic points of view, but also the eventual typological distance between Chinese and learner's L1. Instructors of Chinese as a second or foreign language (CSL/CFL) should not only be aware of the typological features of both Chinese and the learner's L1, but also of the extent to which the two languages conform to the related lexicalization strategies.⁴ This is no trivial matter, since many theoretical aspects remain unclear in the functioning of the DVC construction – despite a huge amount of research being carried out on the encoding of motion events in a large number of different languages (Filipović and Ibarretxe-Antuñano 2015). Furthermore, as this paper will show, many CFL reference works present such constructions in an oversimplified fashion, and rarely take into account (mis)matches between the learners' L1 and L2.

This paper will endeavour to address the issue of DVCs from the specific perspective of language learning/teaching and related reference materials. After introducing the universal and language-specific features that characterise motion event encoding, Mandarin DVCs will be analysed in depth by looking into their semantic and syntactic characteristics, while § 4 will focus on the cross-linguistic features of motion events and, more specifically, on their encoding in Italian. § 5 will analyse the way in which Chinese DVCs are presented and introduced in the main textbooks and grammars adopted by Chinese language programmes in Italian universities, § 6 will present the result and implications for DVC teaching, while § 7 will lay out the conclusions.

2. Motion events: universal and language-specific features

Among the scholars devoting their attention to motion events, Talmy's (1985; 1991; 2000) framework has exerted significant influence on many subsequent theoretical and applied studies in the area (Filipović and Ibarretxe-Antuñano 2015). Talmy's work focuses in particular on the different (conceptual) components of a motion event and how (a variable number of) these components are expressed by the languages of the world. According to Talmy, motion events are situations containing motion, and different internal and external components are argued to characterize such events. Four major internal components are Figure (F), Ground (G), Motion (MT) and Path (P). F is defined as "a moving or conceptually movable object whose path [...] is at issue" while G represents the referent frame or object within a reference frame "with respect to which the Figure's path [...] is characterized". MT intuitively refers to the presence of motion in the event described, while P is the trajectory followed "by the Figure object with respect to the Ground object" (Talmy 2000: 25-26). Two external components can also be identified which are conceptualized as co-events, i.e. as simple events associated with the motion event and bearing either a Manner (M) or Cause (C) relation to it. In fact, an event complex or macro-event such as the motion event, according to Talmy (*Ibidem*), can be either conceptualized as two simple events and the relationship between them - in which case they can be expressed by separate clausal units - or as a single fused event describable within the limits of a single clause. In the latter case, the event complex is characterized by

⁴ Since the distinction between CFL and CSL is not relevant for the purposes of this study, the former term will be used to refer to both.

conflation, which can apply to different components of the motion event (*Ibidem*, 213). Most typically, Chinese and all Indo-European languages except the Romance group are argued to show conflation of MT and a co-event in the verb root, either M, as in (1), or C, as in (2). In both examples below, *the pencil* is the F, *the table* represents the G object, while *off* contains information about the trajectory followed by F with respect to G. However, the verb in (1) conflates motion and information about the manner of motion, while (2) expresses motion and the cause of motion in the verb root.

(1) [The pencil]_F [rolled]_{MOVE+M} [off]_P [the table]_G. (2) [The pencil]_F [blew]_{MOVE+C} [off]_P [the table]_G.

(Adapted from Ibidem, 26)

In contrast, Romance languages, along with Korean and Japanese, as well as Polinesian and Semitic languages, are described as conflating MT and P in the verb root, as shown by the Spanish example in (3):⁵

(3) $[La botella]_{F}$ $[entró]_{MOVE+P}$ $[a la cueva]_{G}$ $[flotando]_{M}$. (Adapted from *Ibidem*, 49)

More importantly, however, Talmy (*Ibidem*) argues that languages show important differences in their lexicalization pattern as far as the core schema or framing event of the motion macro-event is concerned, i.e. the P component.⁶ With respect to the latter, languages are classified as belonging to two types: i) verb-framed languages or ii) satellite-framed languages.

Prototypical verb-framed languages are Indo-European languages, including Italian, for they lexicalize the framing event in the verb root, as mentioned earlier. As the Spanish example in (3) shows, the main verb *entró* encodes information about the P of motion, while supplementary information concerning the M of motion is provided in a second (optional) verbal form, the gerundive *flotando*.

On the other hand, satellite-framed languages refer to those encoding the P component in what Talmy calls a "satellite", i.e. "any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root" (*Ibidem*, 102). They can be either bound affixes or free words and are typically represented by English verb particles, Russian verb prefixes or Chinese verb complements. In the case of example (1) from English, the main verb encodes information about the M of motion, while the information regarding the figure object's trajectory is expressed through the satellite particle *off*.

As stressed by Filipović and Ibarretxe-Antuñano (2015), Talmy's lexicalization patterns were not intended to cover all the possible intra- and inter-linguistic variation, i.e. all the different coding strategies that every single language may avail itself of, but were meant to represent only the most frequent or pervasive strategies within a language or across languages (Talmy 2000: 21).

⁵A third group shows conflation of MT and information concerning the F in the verb root, with languages as Atsugewi and Navaho being cases in point.

⁶More precisely, Talmy (*ibidem*) talks about macro-events with respect to several conceptual domains among which motion is but one. The core schema of any type of event, also referred to as the main event of framing event, is represented by an *association function* that "sets the figural entity into a particular relationship with the ground entity" (*Ibidem*, 218). In the specific case of a motion event, the core schema is represented by the P alone or by the P and the G object.

4

Nonetheless, the Talmian dichotomic typology has faced considerable criticism – particularly regarding the ambiguous notion of satellite, failure to acknowledge languages presenting more than one strategy or the variation existing within typological groups. Such critiques have become more relevant as studies expand globally to explore diverse lexicalization patterns (Filipović and Ibarretxe-Antuñano 2015).

One particular argument that has gained fortune and appears relevant for the Chinese case is found in Slobin (2004; 2006), according to whom a number of languages do not fit Talmy's bi-partite distinction easily. Slobin argues that serial verb languages such as Chinese (but see § 3.3. for another view on the classification of this construction), bipartite verb languages such as the Hokan and Penutian languages and preverb-verb languages such as the Australian language Jaminjung would be better described as equipollently-framed, for "both path and manner are expressed by equivalent grammatical forms" (Slobin 2004: 25), therefore a tri-partite typology is put forth. Moreover, according to Slobin (*Ibidem*), it is the expression of M, rather than P, that has attracted the most attention in the Frog Story studies, a series of studies on several different languages using the book *Frog, where are you?* (Mayer 1969) to elicit narrative descriptions. Hence, Slobin suggests a classification of languages according to the salience of M, i.e. the naturalness or ease of adding M information to P expressions in a certain language: while high-manner-salient languages dispose of an accessible slot for M, with speakers regularly providing M information in motion events description, low-manner-salient languages subordinate M to P, and M information is provided by speakers only when in foreground (Slobin 2004: 25-26).⁷

A second important point is discussed by Beavers et al. (2010) and Croft et al. (2010), among others. This concerns the cross-linguistic definition of *satellite*, which appears to be problematic in the definition given by Talmy (2000) because it excludes certain elements like English prepositions. According to Croft et al. (2010: 206), "anything that is not a verb root but encodes an event component" should be analyzed as a satellite, i.e. anything that cannot "occur as a predicate on its own with the same meaning". Following from this revised definition of *satellite* is a revised typological classification which adds *symmetrical* and *double framing* to Talmy's dichotomic labels.⁸ Among the symmetrical construction type are included coordination, compounding and serialization, an example of the latter type being the DVC construction in Mandarin (but see § 3.3. for another view on the classification of this construction). Interestingly, the double framing construction consisting in a double expression of the P component, both within a verb root and in a satellite, is instead sometimes adopted in Italian, as shall be discussed in § 4.

Lastly, criticism arose around the nature of the semantic components themselves, including the definition of the categories of M and P, which are argued to be excessively broad. The main argument against the two categories is that while they allow for a general typology of lexicalization, they are not able to capture finer-grained similarities and differences across the languages. Further subdivisions of P and M have been proposed by several scholars, including Filipović (2010), Rappaport Hovav and Levin (2010) and Ozcalışkan (2004). Some of these will be discussed with reference to Chinese in § 3.2.

⁷ The proposal is connected with Slobin's (1987) earlier proposal of the *thinking for speaking* hypothesis, i.e. the idea that the specific grammatical strategies available in a language influence the way a certain event is conceptualized and described by the speaker.

⁸ Unlike Talmy, however, Croft et al. propose a cross-linguistic classification of construction types instead of languages as a whole. For example, as argued by Aske (1989), Spanish adopts mainly a verb-framing strategy for motion encoding, but a satellite-faming construction is argued to be acceptable for atelic path expressions, i.e. when boundary-crossing is not involved.

3. Encoding motion events in Chinese

In Mandarin, motion events can be encoded through various (combinations of) motion components, ranging from the use of a single verbal morpheme expressing M/C or DX (deixis), as shown in (a) and (f), to the combination of M/C and P, M/C and DX, P and DX, or M/C, P and DX together, as shown respectively in (b), (c), (e) and (d).⁹

	V1 (M/C)	V2 (P)	V3 (DX)
a	<i>păo</i> 跑'run'/ <i>ná</i> 拿'take'		
Ь	<i>păo</i> 跑 'run'/ <i>ná</i> 拿 'take'	chū 出 'exit'	
С	<i>păo</i> 跑 'run'/ <i>ná</i> 拿 'take'		lái 来 'hither'
d	<i>păo</i> 跑 'run'/ <i>ná</i> 拿 'take'	chū 出 'exit'	lái 来 'hither'
e		chū 出 'exit'	lái 来 'hither'
f			<i>lái</i> 来 'come'

Table 1. Motion events encoding in Mandarin DVCs

Examples (b) to (e) are commonly termed "directional complements" in the classical literature on Chinese linguistics and grammar (Zhu 1982; Liu 1998; Liu et al. 2001), with (b), (c), and (e) representing the simple and (d) the complex variant. The dominant view in the literature, starting from Chao (1968) and Li and Thompson's (1981) seminal volumes, is that these constructions (Fillmore 1988; Fried and Östman 2004) represent instances of resultative verb compounds, i.e. a wider group of two-element compounds in which "the second element signals some result of the action process conveyed by the first element" (Li and Thompson 1981: 54).¹⁰ On this view, direction is but one of the different types of results the action can have, the others being cause, achievement and phase.

3.1 Semantic features of DVCs

Despite variations in DVC definitions or classifications, there is general consensus that both the semantics and the morpheme order follow specific restrictions: as can be easily seen from the examples in (7) to (10), whenever two or more morphemes are used in succession to encode motion events, M or C morphemes always precede P morphemes, which in turn precede DX morphemes.

Additionally, it is widely acknowledged that while M and C morphemes can be either transitive or intransitive verbs, i.e. they can encode either agentive or non-agentive motion, thus including a rather wide array of elements, directional morphemes represent a closed set with a small number of elements varying slightly depending on the author.¹¹ In Lamarre (2007),

⁹ For P verbs to be used alone, a non referential ground NP is generally required for the expression to be grammatical, as in the case of *chū-mén* \boxplus \bigcap 'exit-door' (Lamarre 2008). Note that both M and P information can be expressed also by non-verbal elements such as adjunct prepositional phrases or adverbials (Lin 2019; Wen and Shan 2021). Their analysis is nonetheless beyond the limited purpose of this study.

¹⁰ Yet another view is that DVCs should not be classified as compounds but instead treated and analysed as similar to serial verb constructions (Paul 2008; Chen 2023).

¹¹ Talmy (2000) further distinguishes between self-agentive and nonagentive manner of motion, but this is

6 core and 2 less prototypical elements are included in this class: *jìn* 进 'enter', *chū* 出 'exit', *shàng* 上 'ascend', *xià* 下 'descend', *huí* 回 'return', *guò* 过 'cross', and *qǐ* 起 'rise' and *dào* 到 'arrive'. Lastly, only two verbal morphemes are used to express deictical direction or P, i.e. *lái* 来 'hither' and *qù* 去 'thither'.

In a study based on written novels, as much as 41 M morphemes and 6 neutral morphemes which can function as M morphemes in a DVC were identified, but only 13 were listed among the P morphemes, including both those that can function as the first morpheme in a DVC - i.e. as a main P verb – and those which can function as P complements. Other recent corpus-based accounts such as Lin (2019) have focused on the P morphemes available in (written) Chinese, challenging previous intuition-based distinctions between M and P morphemes. By applying Rappaport Hovav and Levin (2010)'s proposal to Chinese, Lin (2019) provides a set of tests able to disambiguate more systematically not only M from P, but also different types of P elements. More specifically, Lin proposes to distinguish between nonscalar and scalar motion morphemes, i.e. what are traditionally termed as M and P morphemes respectively. A second distinction is made within the scalar morphemes based on whether the scale is open or closed, i.e., if the verbs are (un)bounded. Among the closed-scale elements, a further distinction is then made between two-point and multi-point morphemes, i.e. between punctual and durative events. The order in which the morphemes appear within the DVC is then argued to reflect a Scalar Iconicity Constraint, according to which "the morpheme that adds more specific information about the scale in a motion event tends to occur after the morpheme with less information" (Ibidem, 147), as illustrated below:

Nonscalar > scalar with open scale > scalar with closed two-point scale/ scalar with closed multi-point scale

(Adapted from Ibidem, 130)

The necessity for finer-grained distinctions within the motion components identified by Talmy (2000) is also endorsed by Chu (2004; 2009), who argues that different subcomponents should be taken into account for an appropriate description of the P in Mandarin, which is the central defining property of motion events. In addition to Talmy (2000)'s Vector, Conformation, and Deictic components, Chu adds those of Direction, Dimension, and Perspective, with the latter representing a general concept taken to include the more specific category of Deictic. Each of the five subcomponents is then further broken down into subcomponents, as shown in Table 2:

Subcomponent	Definition	Туре	Example ¹²
Vector	direction of motion	arrival	<i>kāi-dào</i> 开到 'drive-arrive'
	of the F with respect to the G	departure	<i>kāi-zŏu</i> 开走 'drive- away '
		traversal	<i>chuān-guò </i>

hardly taken into account in the classical literature on Chinese DVCs (e.g., Zhu 1982; Liu 1998). Furthermore, M is sometimes treated as a generic cover term for both manner and cause (e.g., Chen 2023).

¹² In compound forms, bold is used to highlight the element encoding the specific P subcomponent.

CARMEN LEPADAT

Conformation	geometric relation-	inside/outside	<i>kāi-jìn</i> 开进'drive-enter'
	ship between the F	surface	<i>zŏu-guò 走过 'walk-cross'</i>
	and the G in space	beside	<i>zŏu-guò 走过 'walk-cross'</i>
		above/beneath	<i>fēi-guò</i> 飞过 'fly-cross'
Direction	orientation of the	vertical: up/down	<i>piāo-shàng </i> 飄上 'float up '
	motion of the F in space	facing: front/back	<i>wăng-qián-zŏu</i> 往前走 'toward-front-walk'
		returning	<i>huí</i> 回 'return'
		verging: divergent / convergent	<i>zŏu-sàn</i> 走散 'walk-scatter'
Dimension	spatial extent of the G	zero (point)	cóng 从 'from'
		one (line)	<i>shùnzhe</i> 顺着 'along'
		two (plane)	<i>zŏu-sàn</i> 走散 'walk-scatter'
		three (volume)	jìn 进 'enter'
Perspective	spatial relationship between F and G/	basic: anchorage/re- gion of attention	<i>piāo-qǐ</i> 飘起 'float-rise'
	speaker's mental an- chorage to F, G and her/himself	deictic: hither/thither	<i>lái</i> 来'hither'/qù去'thither'

Table 2. Path subcomponents identified by Chu (2009: 83)

(4) 球从车库掉进地下室去了.

	Qiú	cóng	chēkù	diào	jìn	dìxiàshì	qù	le
	ball	from	garage	fall	into	basement	thither	SFP ¹³
vector		departure			arrival			
conformation					inside			
direction				down				

¹³ Sentence-final particles (SFPs) are a class of particles used to convey a wide range of illocutionary and pragmatic meanings (Liu et al. 2001).

dimension		volume	
perspective	anchorage	region of attention	thither

Table 3. Analysis of P subcomponents applied (Chu 2004: 177)

Among the several subcomponents of motion that are encoded through P morphemes, deictic ones deserve special mention. In Mandarin, *lai* and *qu*, which are generally rendered as 'toward the speaker/hither' and 'away from the speaker/thither' when used as directional complements (Hui 2011), can be expressed in addition to or regardless of other P subcomponents. In many languages, the deictic verbs *come* and *go* are employed to express deixis and the reference point on which the movement depends is usually the speaker's location (Wu 2023). As far as Mandarin Chinese is concerned, Liu et al. (2001), who adopt the notion of *lìzúdiăn* 立足点 'standpoint', argue that the deictic center of *lai* and *qu* when used in DVCs can coincide with three different entities:¹⁴ the speaker, when the 1st narrative person is used (5), a 3rd person or thing, when a 3rd person narrative is at involved (6), a location being described or in which something occurs (7).

(5) 他向我走过来.

Tā	xiàng	wŏ	zŏu-guò-lái.
3SG.M	towards	ISG	walk-cross-hither
'He walke	ed towards me'		

(6) 看见张ナ	七夫,他急忙	跑了过去	去.		
Kàn-jiài	n Zhāng	dàifu,	tā	jímáng	păo-le-guò-qù.
Look-se	e Zhang	doctor	3SG.M	hurriedly	run-PFV-cross-thither
'When l	he saw Dr. Z	hang, he	ran to h	im in a hurry.'	

(7)	会场里坐了る	下少人,	这时还不	「断有	人进来.					
	Huìchăng-lĭ		zuò	le	bùshăo rén,	zhè	shí	hái	búduàn	уŏи
	Meeting.hall-	inside	sit	PFV	many people	this	time	still	constantly	have
	rén	jìn-lái.								
	people	enter-h	ither							
	'The meeting	hall is f	ull of pec	ple, a	nd more and m	ore a	re still	crowd	ing in.'	

(*Ibidem*, 547-548)

Finally, when taking into account the semantics of the DVCs, it must be mentioned that in addition to the literal meaning consisting in expressing the path or direction of motion, DVCs can express two further meanings characterized by lower degrees of compositionality

¹⁴ For the English verb *come*, Fillmore (1966) shows the possibility of the deictic centre to coincide either with the speaker or the hearer, at either the speech time or the reference time (Wu 2023). Regarding Mandarin Chinese, it has been argued that the semantics of the two verbal morphemes encoding DX are more constrained, for their deictic centre generally coincides with the speaker (Huang 1978; Nakazawa 2007). However, see also Lepadat and Romagnoli (2024a), who account for the possibility of the deictic centre to coincide with the addressee in spoken Mandarin, under specific circumstances.

and transparency: a resultative meaning and an aspectual meaning (Liu 1998; Liu et al. 2001), which are sometimes referred to as figurate or extended meanings. The resultative use of DVCs can be observed when the result or goal reached by an action is encoded rather than physical movement, as in (8) below, while the aspectual meaning is at play in DVCs encoding information on the aspect of the action involved such as the beginning of a new state in (9):

(8) 他终于买上了他喜欢的汽车. Τā zhōngyú măi-shàng-le xĭhuān de gìchē. tā finally buy-ascend-PFV 3sg.m зsg.м like REL car 'He finally managed to buy the car he likes.' (9) 天阴了,下起雪来了. Tiān vīn-le, xià-qĭ хиě lái-le.

Sky dark-PFV descend-raise snow hither-SFP. 'The sky has become overcast, and it started to snow.'

(*Ibidem*, 550, 566)

Importantly, when extended meanings of the DVC are involved, the set of elements that can be used as the first morpheme of the construction are not limited to verbs encoding motion anymore, but they can include activity verbs such as $xi\check{e} \equiv$ 'write', achievement verbs such as $d\check{a}$ $f\bar{1}$ 'hit', static verbs like $\dot{a}i \not \cong$ 'love', and even attributes denoting change of state like $h\bar{e}i \cong$ 'black' (Liu 1998). However, an in-dept analysis of such resultative and aspectual uses of DVCs are beyond the purpose of this paper, which shall be concerned mainly with literal uses of the construction.

3.2 Syntactic features of DVCs

If semantic restrictions apply to the type of verbal morphemes (co)occurring in the DVCs, syntactic restrictions also apply both to their reciprocal order and to the positions that other elements such as direct or locative objects occupy within the construction.

One of the most challenging and still debated aspects of the DVC construction is the positioning of the object – either direct or locative – within the construction. As it is known, Mandarin allows to anticipate direct objects (DOs) preverbally under certain informational-structure conditions such as givenness and topicality (Loar 2011; Lepadat 2021; Lepadat and Romagnoli 2024b). Furthermore, DOs placed preverbally can be marked by the disposal/causative marker $b\ddot{a}$ $\ddot{\mathbb{H}}$, generally when the verbs involved are transitive and highly causative (Li 2006; Yang and van Bergen 2007), as in (10).

(10) 我把球放	汝进篮子国	皀了。.					
Wŏ	bă	qiú	fàng-jìn	lánzi-lĭ	le.		
1sg	ba	ĥall	put-enter	basket-inside	SFP		
'I put the	ball(s) int	to the bas	sket.'				
-				13.7	1	D	

(Yang and van Bergen 2007: 1620)

However, there are many cases in which the object appears within the construction and can occupy different positions according to the DVC type, the object type and the semantic/ pragmatic features of the sentence.

10

Among the most comprehensive treatises on Chinese DVCs is Liu (1998)'s volume, wherein the positions occupied by the object are 6: in the case of a simple DVC with the deictic morphemes *lai* and *qu* as the second verbal morpheme in the construction, it is argued that DOs can occur either before or after these – with restrictions applying to the realisation or completion (*yirán* 已然) of the action in the latter case – whereas locative objects (LOs) can only occur before the deictic morphemes; if the simple DVC contains a P morpheme in second position instead of a DX one, both DOs and LOs can only occur at the end of the construction. More complex appears the situation of the complex DVC, which always contains a DX morpheme as the third verbal morpheme in the construction: the position following the P morpheme in second position is argued by Liu (1998) to be the only one possible for LOs, as well as the most common and frequent for DOs with both realised and non-realised actions; on the other hand, the position following the third morpheme is argued to be compatible only with already completed situations, while the position immediately after the first morpheme is argued to the possible, but very rare. The different positions are schematised in Table 4 below, additionally distinguishing between the DO's patient (P) or agent (A) semantic role.¹⁵

Simple DVC	
(i) NP (A) + V + NP (P/L) + $l\dot{a}i \approx$ 'hither'/ $q\dot{u} \pm$ 'thither'	realised/non-realised
(ii) NP (A/L) + V + $l\dot{a}i$ 来 'hither'/ $q\dot{u}$ 去 'thither' + NP (A/P)	realised
(iii) V + Dir + NP (A/P/L)	realised/non-realised
Complex DVC	
(i) NP (A) + V + Dir + NP (P/L) + $l\dot{a}i \approx$ 'hither'/ $q\dot{u} \pm$ 'thither'	realised/non-realised (most frequent)
(ii) NP (A) + V + Dir + $l\dot{a}i \approx$ 'hither'/ $q\dot{u} \pm$ 'thither' + NP (P)A?	realised
(iii) NP (A) + V + NP (P) + Dir + $l\dot{a}i \times ihither'/q\dot{u} \pm ithither'$	rare

Table 4. Object position and action realisation in DVCs (Liu 1998)

In addition to action realisation or completion, objects definiteness has also been argued to play an important role in determining the position of the DO. According to Zhu (1982), while indefinite DOs can occur after each of the two (11) or three verbal morphemes (12) making up the DVC, definite objects are never used at the end of the construction, but are required to be placed earlier in the construction if the verb is transitive (13):

¹⁵Please note that the classical Chinese linguistics literature (e.g., Lü 1979; Liu et al. 2001) uses the term $b\bar{n}y\bar{u}$ 宾语 'object' to refer to any argument of the verb used in postverbal position, including the subjects of presentative sentences such as *Lái-le yī-ge rén* 来了一个人 'lit.: come-PFV one-CLF man; intended: A man came'. The term *zhūyũ* 主语 'subject', on the other hand, refers in particular to the verbal argument that occupies the sentence-initial/ preverbal, i.e. topical position. In this paper, in describing the Mandarin literature on DVCs, I shall employ the term direct object (DO) to refer to any (non-prepositional) verbal argument that does not occur preverbally and does not encode a location, i.e. is distinct from a locative object (LO).

CARMEN LEPADAT

(11)	拿(-	-本书)来/出	(一本书)).						
	Ná	(yī-běr	1	shū)	lái/exit		(yī-běn		shū)	
	Take	(one-c	CLF	book)	hither/ex	it	(one-c	LF	book)	
(12)	拿(-	-本书)出(一	本书)来(一本书)						
	Ná	(yī-běn	shū)	chū	(yī-běn	shū)	lái	(yī-běn	shū)	
	Take	(one-CLF	book)	exit	(one-CLF	book)	hither	(one-CL	.F book)	
(13)	拿(那	本新的)出(那本新的)	来*(那才	卜新的)					
	Ná	(nà-běn x	:īn de)	chū	(nà-běn	xīn	de) li	ái *(nă	à-běn xīn	de)
	Take	(that-CLF r	new ATTR) exit	(that-CLF	new .	ATTR) h	ither (th	at-CLF new	' ATTR)
Uau	10110 r	if the work is	intropoiti	vo dofini	ita abiasta	can or	lu occu	r in the n	roverbal n	nition

However, if the verb is intransitive, definite objects can only occur in the preverbal position, i.e. acting as sentence subjects (14).

(14) 那只苍蝇又	てて进来了.				
Nà-zhĭ	cāngyíng	yòu	fēi-jìn-lái	le	
That-CLF	fly	again	fly-enter-hither	SFP	
	-				(<i>Ibidem</i> , 148)

Liu (1998)'s volume also tackles the possible occurrence and eventual position of the aspectual particle $le \ \forall$ within the construction. According to Liu (*Ibidem*), le can only occur after the first or the last morpheme in the DVC, with a difference in the scope of the marker and the context of occurrence: when occurring after the first morpheme, the marker has scope over it alone, and the construction is used in narrations to describe actions that are taking place but are not yet realized (15), while the occurrence of le at the end of the DVC coincides with a broader scope over the whole construction, which is generally employed to refer either to already realized actions or states, as in (16), or to depict something that is about to happen, as in (17):

(15)	想到这里, <i>Xiăng-dào</i> Think-arriv 'Thinking a	她的眼刹 <i>zheli,</i> re here about thi	目又涌了 <i>tā</i> 3SG s place, s	上来. <i>de</i> ATTR she burst	<i>yănlèi</i> tears into tea	<i>yòu</i> again rs again.	<i>yŏng-le</i> pour-pFV	<i>shàng-lái</i> ascend-hither
(16)	他昨天就跑 <i>Tā</i> 3SG 'He ran bao	回来了. <i>zuótiān</i> yesterda ck yestere	y day.'	<i>jiù</i> just	<i>păo-hui</i> run-ret	<i>'-lái-le</i> urn-hithe	er-PFV	
(17)	我们的人民 <i>Wŏmen</i> IPL 'Our peopl	就要站起 <i>de</i> ATTR e are abc	已来了. <i>rénmín</i> people out to ris	<i>jiù</i> just e up.'	<i>yào</i> be.abou	it.to	<i>zhàn-qĭ-lái-le.</i> stand.up-raise-h	ither-pFv (<i>Ibidem</i> , 46-47)

This view is not entirely endorsed by other important scholars such as Lu Jianming, however. In Lu (2002), a much more complex set of restrictions is given for the position of the DO, according to: i) the semantic role of the object, ii) the type of complement, and iii)

12

the presence or absence of the marker le.¹⁶ In some cases, Lu further distinguishes between object NPs modified by a numeral (+ classifier) and bare NPs as a further indicator of the DOs acceptability in a certain position. While it is beyond the purpose of this paper to provide an in-depth analysis on the existing literature on this topic, this is clearly relevant to the purpose of highlighting the complexity of the phenomenon under investigation and the major challenges that L2 learners face in the acquisition process.

3.3 The classification debate

As already emerged from the discussion in the previous section, the classification of the Mandarin DVC construction is not unproblematic, and the definition of satellite itself bears directly on the issue. As Talmy (2000) has pointed out, Mandarin is a serial verb language and the DVC could be considered as (originally) being a serial verb construction, i.e., "a mono-clausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument relation between the verbs" (Haspelmath 2016: 296).¹⁷ On this view, the verbal morphemes in the construction should be considered as equally *verbal*, i.e. functioning as full verbs. This argument is employed by Slobin (2004) to argue that a third category should be added to Talmy's dichotomic typology which could account for serial verb-languages, bipartite verb languages and other languages that employ "equivalent grammatical forms" to express both M and P, i.e. equipollently-framed languages (*Ibidem*, 25).

However, Talmy (2000: 199) himself argues that in spite of the serial verb interpretation being still available in Mandarin, the DVC construction has grammaticalized one step further so that the verbal morphemes that appear at the end of the construction have lost part of their original semantic meaning, classifying as satellites rather than fully-fledged verbs. Supporting Talmy's satellite-framed classification of Chinese are, among others, Peyraube (2006)'s diachronical investigation and Lamarre (2007)'s dialectal variation study. Both contributions support the view that although P verbs can be used alone to express motion, when occurring in a DVC construction, "it is obvious that they are no longer fully lexical words (with their original meanings). They have become function words or grammatical elements" (Peyraube 2006: 126) through a process of grammaticalization that caused Mandarin to shift typologically from a verb-framed language in the Archaic period to the current state of satellite-framed language. Similarly, Lamarre (2007) argues that P satellites are a closed-class group of elements grammaticalized from P verbs, and puts forth several pieces of evidence to support the statement, including phonetic reduction and loss of argument structure in the case of deictic P satellites.

Initially against the dominant view that the main verb in a DVC construction is represented by the first verbal morpheme expressing M (see also Chao 1968; Li and Thompson 1981) was Tai (2003), who argued that it is the P component that functions as the centre of

¹⁶Other more recent corpus-based studies such as Basciano and Romagnoli (2022) and Lepadat and Romagnoli (2024b) have also highlighted the relevance of additional factors such as the DO's animacy and activation status in determining its position within the construction.

¹⁷ Serial verb constructions are found in many languages, most notably in isolating languages of West Africa such as Nupe, Yoruba, and Ewe, but also in South-East Asian languages, including Mandarin Chinese (Aikhenwald 2018). According to Peyraube (2006), DVC constructions in Modern Mandarin are thought to have originated from serial verb constructions in Archaic (Classical) Chinese. In these earlier constructions, two verbal units in the form of V1 + V2 shared a semantic argument without the use of overt markers of coordination or subordination to link them.

the predication, i.e. a verb incorporating MT and P which can be used independently and be eventually affixed with the aspect marker $le \car{J}$.¹⁸

4. Encoding motion events in Italian

With regard to Italian, Talmy (2000) has classified it among verb-framed languages, together with other Romance languages. Unlike Mandarin, Italian is argued to prototypically encode P in the main verb, while M is (optionally) expressed through elements such as gerundive forms or PPs, as illustrated in (18):

(18) Attraversò	la	strada	correndo/	а	grandi	passi.
Cross.3sg.pst.rem	the	street	running	in	big	steps
'She crossed the str	eet runn	ing/in big	g steps.'		c .	-
		-		(Adapted	from Ca	ardini 2012: 169)

This entails, as noted by Slobin (2004), that Italian subordinates the expression of M to that of P, with M only being encoded when it represents the focus of attention. As a consequence, not only is the M of motion less prominent in the minds' of Italian speakers, but the repertoire of M verbs available in Italian is also significantly less rich than that of satellite-framed languages like Chinese and English. More generic M verbs are often used to cover the meanings that, in these languages, are expressed by a broader and more fine-grained set of M verbs. An example is the Italian verb *suonare* 'to play (an instrument)', which must be necessarily rendered in Chinese through more specific M verbs such as *tán* 弹 'pluck', *jī* 击 'beat', *dǎ* 打 'hit', *chuī* 吹 'blow', or *lā* 拉 'pull, drag' (Cominetti and Panunzi 2020).

Starting from Schwarze (1985), however, several scholars have pointed out the hybrid nature of the language with respect to the Talmian typology. In fact, Italian has been shown to employ not only verb-framed constructions similar to those described by Talmy for Spanish, in which MT and P are typically conflated in a verb root (19), but also two-element constructions in which the verbal root conflates MT and DX, while a satellite adverbial element encodes P, as in (20). In some cases, P is redundantly encoded both in the verb root and the adverbial element, as in (21).

(19)) Il	gato	esce	dalla		casa	(correi	ndo).
	The	cat	exits	from.the	e	house	(runni	ng)
	'The	cat exit	ts the ho	use (runi	ning).'			0
(20)	Il The 'The	gatto cat cat cor	viene comes nes out c	fuori out of the hou	dalla from.the use.'	e	casa. house	
(21)	Il The 'The	gatto cat cat exit	esce exits ts the hor	fuori out use.'	dalla from.the	e	casa. house	
							(.	Adapted from Schwarze

1985: 360)

¹⁸ For a fresher look on the topic see Liang and Tai (2024).

Far from being occasionally-used strategies, such constructions represent in nowadays Italian "a widespread lexical resource and their diffusion depends very loosely on diatopic or diamesic factors" (Iacobini and Masini 2006: 157).

Such satellite-framed constructions, referred to as *syntagmatic verbs* (SV) in Simone (1997) or *complex verbs* in Ježek (2002), however, have only recently started to be addressed by a number of studies, both from the synchronic and the diachronic perspectives. In Simone (1997), SV constructions are described as being formed by a motion or a static verb followed by an adverb indicating position, distance or direction. Interestingly, from a semantic point of view, the verbal head can encode not only P or DX, but also M, as emerges from the list provided in Simone (*Ibidem*, 159-160), in which verbs such as *saltare* 'jump' o *scappare* 'escape' are included. On the other hand, the adverb can either intensify the information conveyed by the verb (*scappare via* 'run away') or specify the direction of motion (*saltare fuori* 'jump out'), but it can also bring about completely new meanings characterized by zero transparency or compositionality (*portare avanti* 'carry on').

In Ježek (2002), a continuum of meaning transparency and syntactic cohesion degrees is identified for the construction, which brings about five different semantic types with different functions:

- i) Specification of motion direction;
- ii) Redundant expression of motion direction;
- iii) Addition of dynamicity;
- iv) Extended/figurate meaning;
- v) Non-compositional meaning.

In Iacobini and Masini (2006), however, the semantic properties of the SVs are reduced to three main groups expressing locative (eg., *saltare fuori* 'jump out'), aspectual and/or actional (eg., *entrare dentro* 'enter in'), and idiomatic meaning (eg., *mettere dentro* 'to emprison'), which are reminiscent of Liu (1998)'s categorisation of Mandarin DVC distinguishing among directional, resultative and aspectual meanings (see § 3.1).

From a syntactic point of view, SVs are argued to be separable only by light elements, such as clitic pronouns and adverbs, or phrasal heads, and to be hardly ever dislocatable. According to Jacobini and Masini (2006), SVs, which they refer to as verb-particle constructions, can be either intransitive or transitive, and in the latter case DOs normally occur to the right of the particle, as in (22), unlike what happens with regular verbs followed by locative adverbs (23).

(22)	Metti	su	il	caffè		
	Put.imper	on	the	coffee		
	'Put on the	coffee'				
(23)	Metti	il	caffè	sul	fuoco	
	put.imper	the	coffee	on.the	fire	
'Put the coffee on the stove'						

(*Ibidem*, 158)

Moreover, another point further highlights the mixed nature of Italian with respect to the Talmian typology and the differences existing between Italian and other Romance languages falling in the verb-framed category: Spanish only rarely allows the use of directional complements, i.e. when a M or MT verb is followed by the prepositions *hasta* 'until', *hacia* 'toward' or

a 'to' – with several restrictions applying to the latter case (Fábregas 2007: 170). In other words, all the cases in which a boundary-crossing or a telic motion is involved appear to disallow the use of SVs (Bandecchi 2011). On the other hand, Italian appears to allow for a number of M verbs used in their inaccusative sense to be followed by adverbial particles indicating P, regardless of the telicity of the event. A case in point is represented by the example in (24), wherein the particle *su* 'up' expresses the final point – *telos* – of the spatial displacement (Perissutti 2012).¹⁹

(24) Maria	è	corsa	su
Maria	is	run	up
'Maria rai	n up.'		⁻

(*Ibidem*, 66)

Arguably, at least as far as the three former types of SVs identified by Ježek (2002) and the former two mentioned by Iacobini and Masini (2016) are concerned – all of which are ascribable to the literal use of the construction – a certain amount of similarity can be observed with respect to Mandarin DVCs which could be exploited as a strategy to bridge the typological gap between the two languages and facilitate the acquisition of Chinese DVCs.

To sum up, the strategies available in Italian to encode a motion event include both verbframed (a, b) and satellite-framed strategies (d), as well as mixed strategies encoding redundantly the P component both in the main V and in the satellite adverb (c). This is shown in Table 5, which can be compared for reference with the satellite-framed strategies illustrated for Chinese in Table 1.

	V (P/M/C)	Gerund/PP (M)	Adv (P)
а	<i>uscire</i> 'exit'/ <i>portare</i> 'take'		
b	<i>uscire</i> 'exit'/ <i>portare</i> 'take'	<i>correndol di corsa</i> 'run- ning'	
С	uscire 'exit'		<i>fuori</i> 'out'
d	<i>correre</i> 'run'/ <i>portare</i> 'take'		<i>fuori</i> 'out'

Table 5. Motion events encoding in Italian

5. Chinese motion events in Italian Teaching materials: materials and method

The discussion and research concerning the typological distance between Italian and Chinese and the eventual overlaps between directional constructions in the two languages has had only a limited impact on the language teaching materials adopted in Italy. Overall, the impression that emerges from the analysis of CFL textbooks and grammars is that although the complexity of the constructions at hand is well acknowledged by the authors, very little attention is devoid to comparative features of the L1 and L2. To assess the extent to which the semantic and syntactic features of Mandarin DVCs are treated in teaching materials, as well as their (a)symmetries with respect to the learners' L1, a survey has been conducted on the textbooks and grammars

16

¹⁹ The topic has been discussed in detail in Folli and Ramchand (2005), *i.a.*, where an explanation of the behaviour of these constructions is provided in terms of a more general feature of Italian resultative constructions.

employed for CFL teaching by three major Italian universities. In particular, the sample analysed includes materials adopted by the University Ca' Foscari of Venice, Roma Tre University, and the University of Naples "L'Orientale". The three universities chosen are located in different parts of Italy (North, Centre and South respectively) and all adopt different textbooks and grammars, which can be considered as representative of the most frequently employed teaching materials in the country. All the materials are listed in Table 6 below.

University	Textbook(s)	Grammar
Ca' Foscari University of Venice	Abbiati and Zhang (2010), Vol. 1-2	Abbiati (1998)
Roma Tre University	Masini et al. (2021), Vol. 1-2	Romagnoli and Wang (2016)

University of Naples "L'Orientale" Masini et al. (2010), Vol. 1-2 Paternicò et al. (2021)

Ta	ble 6.	Textboo	oks and	grammars	surveye	d
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As far as the first group of teaching materials is concerned, namely textbooks, a few things can be observed concerning the introduction of the directional construction. First, Abbiati and Zhang (2010) introduce the topic of DVCs already in the first volume, while both Masini et. al (2010) and Masini et. al (2021) only introduce the construction later in the second volume.²⁰ However, while Masini et al. (2010) concentrate the discussion of the topic in 4 of the 40 units making up the two volumes, in both Masini et al. (2021) and Abbiati and Zhang (2010), the discussion appears more uniformly distributed across several units, with fewer features being presented at once, as can be observed from Table 7.

Textbook	Volume	Unit	Content
Abbiati and Zhang (2010)	1	14	simple DVCs with <i>lái</i> 来 'hither'/qù 去 'thither'
	1	21	position of locative and direct object in simple DVCs with <i>lái</i> 来 'hither'/qù 去 'thither'
	2	26	simple DVCs with P verbs
	2	27	negative potential use with simple DVCs
	2	28	complex DVCs
	2	29	figurate uses of <i>qĭ-lái</i> 起来 'rise-hither'
	2	34	figurate uses of qĭ-lái 起来 'rise-hither'
	2	35	figurate uses of <i>shàng</i> 上 'ascend'

²⁰ All three textbooks considered are made up of 2 or more volumes. According to the teaching syllabi provided by the three universities involved in the study, the first 2 volumes of each textbook are used during the first and second years of bachelor programme teaching.

CARMEN	LEPADAT
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	2	37	figurate uses of <i>chū(lái)</i> 出(来) 'exit(-hi-ther)'
	2	42	figurate uses of <i>xià-qù</i> 下去 'descend-thi- ther'
	2	46	figurate uses of guò 过 'cross'
Masini et al. (2021)	2	5.1	simple DVCs with <i>lái</i> 来 'hither'/qù 去 'thither' simple DVCs with P verbs position of locative objects in simple DVCs
	2	5.2	simple DVCs with non-displacement Vs position of direct objects
	2	8.1	complex DVCs position of direct objects with complex DVCS position of locative objects with complex
			DVCS
	2	10.1	use of bă 把 with DVCs
	2	10.2	use of bă 把 with DVCs
	2	14.1	figurate uses of DVCs <i>xià-qù</i> 下去 'de- scend-thither', <i>qĭ-lái</i> 起来 'rise-hither', <i>xià-lái</i> 下来 'descend-hither', <i>chūlái</i> 出来 'exit-hither'
	2	14.3	figurate use of <i>qĭ-lái</i> 起来 'rise-hither', <i>chūlái</i> 出来 'exit-hither', 上 <i>shàng-lái</i> 来 'ascend-hither' negative potential uses of figurate DVCs
Masini et al. (2010)	2	10	simple DVCs with <i>lái</i> 来 'hither'/ <i>qù</i> 去 'thither'
			position of locative and direct object in simple DVCs with $l\dot{a}i \approx \text{'hither'}/q\dot{u} \pm \text{'thither'}$
	2	12	complex DVCs position of locative and direct object in complex DVCs use of <i>bă</i> 把 with DVCs
	2	13	potential use of DVC
	2	17	figurate uses of DVCs <i>chūlái</i> 出来 'exit-hi- ther', <i>qĭlái</i> 起来 'rise-hither', <i>xià-qù</i> 下去 'descend-thither', <i>xià-lái</i> 下来 'descend-hi- ther'

Table 7: DVC introduction in surveyed textbooks

What remains constant throughout the three textbooks are the main features touched upon and the sequence in which they are introduced to learners: simple DVCs are always introduced before complex ones, and both always precede the introduction of (negative) potential and figurate uses of DVCs. However, upon closer examination, what can be also observed is that all three textbooks choose to leave out most of the sematic features of DVCs described in § 3.1, together with other detailed information concerning their syntactic features § 3.2.

In order to assess the extent to which both syntactic and semantic features are treated in the material surveyed, five syntactic and five semantic features were selected based on the discussion in § 3.1 and 3.2: the former include direct object (DO) and locative object (LO) position, inclusion of the possibility for DOs to be positioned immediately after the first verbal morpheme in complex DVCs, object preposing with or without $b\check{a}$ 把, and position of the aspectual marker $le \ T$. The latter encompass the semantic combination of M/C verbs and DX verbs alone (e.g., $n\acute{a}l\acute{a}i$ 拿来 'take-thither'), the distinction between agentive and non agentive motion, the mention of other constraints concerning the semantics of the verbs (Vs) such as the existence of different types of path verbs (Lin 2019) or path subcomponents (Chu 2009), the standpoint with reference to which the DX component is to be interpreted (Liu 1998), and semantic constraints on the positions of objects (Os) within the compound such as action realisation (Liu 1998) and definiteness (Zhu 1982).

Table 8 shows that out of the five syntactic features emerged as problematic based on § 3.2, all the three textbooks provide explanations and examples concerning three of them: the position of direct and locative objects, and the use of 把 or preposing for direct object anticipation. However, only Masini et al. (2021) acknowledges the possibility for direct objects to be positioned after the first verbal morpheme in complex DVC, while the remaining two textbooks provide no mention or occurrence of the object in this position. Furthermore, although a few examples may be found throughout texts and exercises, no explicit explanation is provided in the textbooks concerning the position of the aspectual marker \vec{J} .

Features		Abbiati and Zhang (2010), Vol. 1-2	Masini et al. (2021), Vol. 1-2	Masini et al. (2010), Vol. 1-2
Syntactic	DO position	yes	yes	yes
	LO position	yes	yes	yes
	V1 + DO + V2 + V3	no	yes	no
	bă 把 /object pre- posing	yes	yes	yes
	Position of $\vec{\;}$	only examples	only examples	only examples
Semantic	M/C + DX only	yes	yes	no
	(Non)agentive mo- tion	no	yes	no
	Other constraints on Vs	no	no	no
	Standpoint	no	yes	yes
	Constraints on Os	no	no	no
Comparative	Italian equivalent	no	no	yes

Table 8. DVC features in surveyed textbooks

As far as the semantic features of the DVCs are concerned, the situation is less reassuring, since 2 of the five features surveyed were completely absent from all three textbooks, while other three appeared only in some. First, while all the three textbooks explicated the possibility of path verbs to be followed by deictic verbs, and to be eventually preceded by a displacement verb, only Abbiati and Zhang (2010) and Masini et al. (2021) acknowledged the possibility for deictic verbs to follow directly M or C verbs. Furthermore, only the latter textbook mentions the distinction between agentive and non-agentive motion (in terms of verbs expressing motion vs verbs that imply motion without expressing it directly) and the possibility for both to enter a DVC construction. However, no explicit mention was found regarding other semantic restrictions applying to the morphemes of the DVC, either concerning the existence of different types of path verbs (Lin 2019) or path subcomponents (Chu 2009). Regarding semantic constraints on the object position, no mention was found in the textbooks analysed, while the adoption of a specific standpoint in relation to which the motion is described when deictic verbs are employed is explained in both Masini et al. (2010) and Masini et al. (2021), but no reference was found in Abbiati and Zhang (2010), where the only information provided is that they express rapprochement or distancing, without specifying the reference point.

Lastly, only in Masini et al. (2010) explicit mention was made regarding the Italian equivalents of the DVC construction. In this volume, it is overtly stated that in Italian, directional complements are often render by adding an adverb to a motion verb.

Turning our attention to the reference descriptive grammars consulted, the situation is slightly different, with more of the syntactic and semantic traits of the DVCs being detailed. Regarding syntax, all the features taken into account appear introduced and discussed to some extent in each of the three grammars. The only exception is represented by the complex DVC pattern in which a DO follows immediately a M or C verb, which is never mentioned or encountered in Abbiati (1998)'s reference grammar. Concerning the semantics of the construction, the grammars consulted also appear to add more information with respect to that provided in the textbooks. For one, all the grammars account for the possibility of using M verbs followed by deictics alone, a feature that was present only in two textbooks. Second, examples of agentive motion as distinct from non-agentive motion can be encountered in all the three grammars, although explicit mention to the distinction is only provided in Abbiati (*Ibidem*) in terms of (in) transitivity of the construction and in Paternicò et al. (2021) as verbs describing either motion or the cause of motion. Third, reference to the standpoint adopted in relation to deictic morphemes is encountered in two of the three grammars consulted, Romagnoli and Wang (2016) and Paternicò et al. (2021), adopted respectively by Roma Tre University and the University of Naples "L'Orientale", while both the grammar and the textbook adopted by the Ca' Foscari University of Venice fails to account for this semantic aspect of the DVCs. Moreover, mention of semantic constraints applying to the position of the object within the construction was found in Paternicò et al. (*Ibidem*), who tackle object definiteness and explain that while definite DOs can occur after the first or the second verbal morpheme in a complex DVC, indefinite DOs are to be collocated either before the DX morpheme or at the end of the construction. However, none of the three grammars consulted contained additional mention of the semantic constraints that may apply to the combination of the verbal morphemes in the DVC constructions.

Lastly, it was also found that Paternicò et al. (*Ibidem*)'s volume provide direct reference to the comparison between Chinese and Italian in the encoding of motion events, with the possibility in Italian to express path information by adding the adverbs *dentro* 'inside' and *fuori* 'outside' to M verbs.

Туре	Feature	Abbiati (1998)	Romagnoli and Wang (2016)	Paternicò et al. (2021)
Syntactic	DO position	yes	yes	yes
	LO position	yes	yes	yes
	V1 + DO + V2 + V3	no	yes	yes
	<i>bă</i> 把 / object preposing	yes	yes	yes
	Position of $\vec{\mathbf{j}}$	yes	yes	yes
Semantic	M/C + DX only	yes	yes	yes
	(Non)agentive motion	yes (transi- tivity)	only examples	yes (motion/ cause)
	Other constraints on Vs	no	no	no
	Standpoint	no	yes	yes
	Constraints on Os	no	no	yes (DO definite- ness)
Comparative	Italian equivalent	no	no	yes

Table 9: DVC features in surveyed grammars

Overall, it can be observed that higher importance and attention is devoid in both grammars and textbooks to features of syntactic nature, while semantic constraints applying to both verbal morphemes and objects are much less prominent in both types of teaching materials. However, it can also be observed that textbooks and grammars tend to complement each other, and with a few exceptions, the features that receive limited attention in the textbooks are often explored in greater detail in the grammars adopted.

6. Results and teaching implications

The analysis in the previous section reveals that there is a certain gap between our current theoretical understanding of the DVC construction in Mandarin and the way this is presented in teaching materials, at least as far as the limited sample surveyed here is concerned. The most apparent issue is the tendency to present an oversimplified picture of the complex interplay of semantic and syntactic features that govern DVC use in Mandarin. In fact, if most of the syntactic features surveyed in this study appear to be introduced and treated to some extent by all the textbooks and grammars considered, the same cannot be said for their semantic characteristics. While this approach simplifies the learning process for students, it also prevents them from fully grasping the construction, leaving certain critical aspects to chance. For instance, although object positioning within DVCs is generally covered, learners are not adequately informed about the semantic constraints involved. While most texts agree that direct objects (DOs) can occupy various positions in the compound, no explanation is given to the learners of the fact that object definiteness and action realisation significantly influence these positions.

CARMEN LEPADAT

Consequently, learners might produce sentences like (25) without realising that the placement of a bare noun which has been recently introduced into the discourse, and is therefore to be interpreted as definite, at the end of the construction is incorrect:²¹

(24) *拿出来词典		
* Ná-chū-lái	cídiăn	
Take-exit-hither	dictionary	
'Take out the dictionary'		

(Lu 2002: 14)

Similarly, learners are not aware of the fact that objects should not be placed at the end of the construction unless the action is perfective or already completed. As a result, nothing prevents them from using combinations like the following in imperative or hortative sentences (26):

(25) 搬过来一把椅子			
Bān-guò-lái	уī	bă	yĭzi
Move-cross-hither	one	CLF	chair
'Move a chair over l	here.'		

(*Ibidem*, 13)

A second significant characteristic of DVCs that is often not addressed in teaching materials is the range of semantic constraints that govern the combination of verbal morphemes within the construction. Although the textbooks and grammars reviewed do provide some information on the nature of these morphemes, they generally offer limited guidance on which combinations are permissible or restricted. For instance, while the grammars tend to present more detailed syntactic and semantic information compared to textbooks, this information is still often incomplete. In Abbiati (1998), for example, the explanation is limited to noting that verbs functioning as directional complements express motion. Romagnoli and Wang (2016) expand on this by specifying that P verbs convey the direction of motion, with the destination or target encoded through postverbal locative objects. They further note that the deictic morphemes *lái* \pm 'come' and $q\dot{u} \pm$ 'go' are used to indicate movement toward or away from the speaker, respectively. Paternicò et al. (2021) provide the most comprehensive information among the sources surveyed, detailing that directional complements are typically used with verbs indicating a change of location of an entity from one spatial point to another, including details about the manner and cause of the motion. They further describe P verbs as indicating the trajectory or path of the action, while DX verbs position the action in relation to the speaker, representing either movement toward or away from them. Additionally, all three grammars reviewed explicitly mention the syntactic order in which the verbal morphemes should occur, specifying that M verbs precede P verbs, which in turn precede DX verbs.

However, the grammars offer minimal guidance on how learners should differentiate between verbs that encode the manner of motion and those that encode direction. Verbs that are less straightforward or less frequently encountered, such as *tuì* 退 ('recede'), *fǎn* 反 ('return'), *dǎo* 倒 ('topple/fall down'), *diào* 掉 ('fall'), *jiàng* 降 ('descend'), and *shēng* 升 ('ascend'), can be particularly challenging for learners to categorize accurately. This difficulty is amplified by the

 $^{^{21}}$ The only exception is Paternicò et al. (2021)'s grammar, which, as mentioned in § 5, tackles object definiteness in relation to DVCs containing causative verbs, or, in their terms, verbs that imply the displacement of an object.

fact that combinations of P verbs are possible, although their usage is highly constrained by the specific semantics of each verb. For instance, when learners encounter combinations of *tui* and *hui* \square ('return'), or *făn* and *hui*, they might mistakenly interpret *tui* and *făn* as M verbs simply because they precede another verb that encodes the direction of motion.

To address these issues, it is essential for language instructors to first grasp the distinctions between subclasses of P verbs, enabling them to effectively clarify students' doubts and provide appropriate guidance when errors occur. One potential instructional strategy would be to place greater emphasis on the semantics of both M and P verbs, highlighting the existence of different types of P verbs. This could include providing specific examples of 'peculiar' or polysemous verbs, along with a discussion of acceptable versus unacceptable combinations of these morphemes.

A related issue concerns the lexical inventory of M and C verbs introduced in teaching materials. Given the emphasis that satellite-framed languages place on the expression of manner, contrasted with the relatively lower usage of generic motion verbs in Chinese as compared to verb-framed languages like Italian, it is crucial for teachers to ensure that the range of verbs presented to learners is broad enough to cover diverse situations. For instance, research has shown that the generic Italian verb mettere ('to put') is used in a variety of contexts that cannot be adequately covered by the generic Mandarin equivalent *fang* 放 ('to put'). Instead, Mandarin requires the use of verbs expressing more specific ways of putting, such as $p\bar{u}$ f ispread for placing a cloth on a table, *chā* f insert for putting a pencil through a ring, and dié 叠 'pile up' for stacking one chair on top of another (Cominetti and Panunzi 2020). One strategy that textbooks could adopt to address this issue is to explicitly highlight the more limited range of uses for generic verbs like *fang* compared to the Italian *mettere* when introducing *shēngcí* 生词 'new words' in each unit. Providing more specific equivalents for the cases where *fang* cannot be appropriately used could help clarify these distinctions for learners. Additionally, focusing on frequent and strong collocations for each of these verbs could guide students in mapping the meaning of a single generic verb in their L1 to the multiple, more nuanced verbs required in Mandarin.

Relying on frequent collocations might prove useful also in addressing the issue of acceptable versus unacceptable combinations of verbal morphemes in the DVCs, as well as guiding learners in selecting among various acceptable combinations that share similar meanings but differ in frequency of occurrence. For example, Lin (2019) points out that although both *luò* \ddot{R} 'fall' and *jiàng* \ddot{R} 'descend' are path morphemes encoding a downward direction of motion, the M verb *piāo* \underline{M} 'to float' exhibits a strong collocation only with *luò* \underline{R} . While some instances of *piāo* \underline{M} followed by *jiàng* \underline{R} can be found in the reference corpus, they are relatively rare. We believe that only through explicit focus on form and proper guidance can learners be expected to achieve native-like mastery of the construction, including the ability to differentiate between morphemes that have similar but not overlapping meanings.

Lastly, explicit mention to the closest equivalent in the learners' L1 to Mandarin DVCs might be useful to help learners grasp the possibility of multiple layers of information concerning different components of motion to be expressed at the same time. Parallels with the array of possible combinations of motion verbs and adverbs in Italian might represent a way of high-lighting how nuanced details about the direction, manner, and perspective of a displacement action can be encoded through compact forms. For instance, parallels could be made between expressions such as *shàng-qù* $\pm \pm$ 'ascend-go' and *andare/salire su* 'go/ascend-up', *dài-xià* \oplus 5 'bring-descend' and *portare giù* 'bring-down'. This comparative approach could facilitate a deeper cognitive link between the two languages, enabling learners to transfer their existing linguistic knowledge to the new language framework more effectively.

7. Conclusions

The study of Chinese DVCs poses significant challenges in language acquisition, particularly for Italian learners, due to the typological differences between Chinese and Italian. Chinese, as a satellite-framed language, encodes motion events differently from Italian's verb-framed structure, complicating the understanding of DVCs for learners. This mismatch, coupled with the morphosyntactic and semantic complexity of the construction, makes it difficult to master.

This paper aimed to provide a detailed overview of Chinese DVCs, analysing their syntactic and semantic structure, which involves encoding multiple components of a motion event through compact forms consisting of two or three verbal morphemes. It also explored how motion events are encoded in Italian, highlighting that while the typological differences necessitate learners to adopt a new conceptual framework, the presence of syntagmatic verb constructions in Italian could offer a helpful strategy to bridge this gap and aid in the acquisition of Chinese DVCs.

Through the analysis of the textbooks and grammars used in three major Italian universities, it became evident that many teaching materials tend to oversimplify the presentation of DVCs, often neglecting their full semantic range and failing to address cross-linguistic differences that could help learners avoid transfer errors. To improve instruction, teachers should not only be aware of the complexities of DVCs but also address the typological (a)symmetries between Chinese and the learners' L1.

In addition to the typological challenges, this study also highlights the need to incorporate a deeper understanding of both the syntactic and, more crucially, the semantic features of DVCs into teaching materials. The findings indicate a significant gap in the treatment of these complexities within existing textbooks and grammars, suggesting that learners may encounter difficulties in grasping the nuances of DVC usage. To address this, it is essential to emphasize key elements such as object definiteness, action realisation, and a more detailed representation of the semantic combinations of morphemes in DVCs.

References

Abbiati, Magda. 1998. Grammatica di cinese moderno. Venezia: Cafoscarina.

- Abbiati, Magda, and Ruoying Zhang. 2010. *Dialogare in cinese: corso di lingua colloquiale*. Vol. 1-2. Venezia: Cafoscarina.
- Aikhenvald, Alexandra. 2018. Serial Verbs. Oxford: Oxford University Press.
- Aske, Jon. 1989. "Path predicates in English and Spanish: A closer look." In Proceedings of the Fifteenth Annual Meeting of the Berkeley Linguistics Society, ed. by Kira Hall, Michael Meacham, and Richard Shapiro, 1–14. Berkeley: Berkeley Linguistics Society.
- Bandecchi, Valeria. 2011. "Classi di parole, strutture e combinazioni nella lessicalizzazione degli eventi di moto in italiano L2." *Studi e Saggi Linguistici* XLIX: 125-153.
- Basciano, Bianca, and Chiara Romagnoli. 2022. "Constraints on the position of definite objects in directional constructions: A corpus-based account." Paper presented at the 35e Journées de linguistique d'Asie orientale, Paris, 7-9 July 2022.
- Beavers, John, Beth Levin, and Shiao-Wei Tham. 2010. "The typology of motion expressions revisited." *Journal of Linguistics* 44: 183–316.
- Cardini, Filippo-Enrico. "2012. Grammatical constraints and verb-framed languages: The case of Italian." Language and Cognition 4 (3): 167-201.

Chao, Yuen Ren. 1968. A Grammar of Spoken Chinese. Beijing: The Commercial Press.

Chen, Zhishuang. 2023. "Directional serial verb constructions in Mandarin: A neo-constructionist approach." *Journal of Linguistics* 59: 697–736.

- Chu, Chengzhi. 2004. Event Conceptualization and Grammatical Realization: The Case of Motion in Mandarin Chinese. PhD diss., University of Hawaii at Manoa.
- Chu, Chengzhi. 2009. "Path of motion: Conceptual structure and representation in Chinese." In *Studies of Chinese Linguistics: Functional Approaches*, ed. by Janet Z. Xing, 65-84. Hong Kong: Hong Kong University Press.
- Cominetti, Federica, and Alessandro Panunzi. 2020. "Just a Matter of 'Manner'? Modeling Action Verb Semantics in an Inter-Linguistic Perspective." *TESTI E LINGUAGGI* 14: 217-241.
- Croft, William, Jóhanna Barðdal, and Willem Hollmann. 2010. "Revising Talmy's typological classification of complex event constructions." In *Contrastive Studies in Construction Grammar*, ed. by Hans C. Boas, 201–236. Amsterdam: John Benjamins.
- Fábregas, Antonio. 2007. "An Exhaustive Lexicalisation Account of Directional Complements." In Tromsø Working Papers on Language & Linguistics: Nordlyd 34.2, Special issue on Space, Motion, and Result, ed. by Monika Basic, Marina Pantcheva, Minjeong Son, and Peter Svenonius, 165–19. Tromsø: CASTL.
- Filipović, Luna. 2010. "Thinking and speaking about motion: Universal vs. language-specific effects." In Space in Language, ed. by Giovanna Marotta, Alessandro Lenci, Linda Meini, and Francesco Rovai, 235–248. Firenze: Edizioni ETS.
- Filipović, Luna, and Iraide Ibarretxe-Antuñano. 2015. "Motion." In *Handbook of Cognitive Linguistics*, ed. by Ewa Dabrowska and Dagmar Divjak, 27-545. Berlin: Walter de Gruyter.
- Fillmore, Charles J. 1966. "Deictic categories in the semantics of 'come'." *Foundations of Language* 2 (3): 219–227.
- Fillmore, Charles J. 1988. "The Mechanisms of 'Construction Grammar'." In *Proceedings of the Fourteenth Annual Meeting of the Berkeley Linguistics Society*, ed. by Shelley Axmaker, Annie Jaisser, and Helen Singmaster, 35-55. Berkeley: Berkeley Linguistics Society.
- Folli, Raffaella, and Gillian Ramchand. 2005. "Prepositions and results in Italian and English: An analysis from event decomposition." In *Perspectives on Aspect*, ed. by Hank J. Verkuyl, Henriette De Swart, and Angeliek van Hout, 81-105. Dordrecht: Springer.
- Fried, Mirjam, and Jan-Ola Östman. 2004. "Construction grammar: A thumbnail sketch." In *Construc*tion Grammar in a Cross-Language Perspective, ed. by Mirjam Fried and Jan-Ola Östman, 11-86. Amsterdam: John Benjamins.
- Haspelmath, Martin. 2016. "The Serial Verb Construction: Comparative Concept and Cross-linguistic Generalizations." *Language and Linguistics* 291–319.
- Huang, ShuanFan. 1978. "Space, time and the semantics of lai and qu." In *Proceedings of Symposium on Chinese Linguistics, 1977 Linguistic Institute of the Linguistic Society of America*, ed. by Robert L. Cheng, Ying-Che Li, and Ting-Chi Tang, 55–66. Taipei: Student Book Co.
- Hui, Yin. 2011. "The cognitive semantics of Chinese motion/directional verbs." Working Papers of the Linguistics Circle of the University of Victoria, 118–125.
- Iacobini, Claudio, and Francesca Masini. 2016. "The emergence of verb-particle constructions in Italian: locative and actional meanings." *Morphology* 16: 155–188.
- Ježek, Elisabetta. 2002. "Lo sfondamento di un confine tipologico. Il caso dei verbi complessi nell'italiano." In *Parallela 8. Lingue di confine, confini di fenomeni linguistici*, ed. by Patrizia Cordin, Rita Franceschini, and Held Gudrun, 289-308. Roma: Bulzoni.
- Lepadat, Carmen. 2021. Not just Postposed Topics. An integrated pragmatic account of the sentence-final slot in Mandarin Chinese. PhD diss., Sapienza University of Rome.
- Lepadat, Carmen, and Chiara Romagnoli. 2024a. "Beyond the deictic value: A pragmatic account of directional *lái* 来 and *qù* 去 in naturally-occurring data." Paper presented at the 8th edition of the Study Days on Chinese Linguistics by the Italian Association of Chinese Linguistics (AILC), Verona, 19-21 June 2024.
- Lepadat, Carmen, and Chiara Romagnoli. 2024b. "Post and preverbal objects in spoken Chinese motion events: a pragmatic corpus-based analysis." Paper presented at the *12th International Conference of the European Association of Chinese Linguistics*. Rome, 19-20 September 2024.
- Lamarre, Christine. 2007. "The linguistic encoding of motion events in Chinese: with reference to cross-dialectal variation." In *Typological studies of the linguistic expressions of motion events: Perspectives*

CARMEN LEPADAT

from East and Southeast Asia, ed. by Christine Lamarre and Toshio Ohori, 3-33. Tokyo: University of Tokyo.

- Lamarre, Christine. 2008. "The linguistic categorization of deictic direction in Chinese With reference to Japanese." In *Space in Languages of China*, ed. by Dan Xu, 69-97. Berlin: Springer.
- Li, Audrey Yen-hui. 2006. "Chinese Ba." In *The Blackwell Companion to Syntax*, ed. by Martin Everaert and Henk van Riemsdijk, 374–468. Malden: Blackwell.
- Li, Charles N., and Sandra Thompson. 1981. *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.
- Liang, Siyuan, and Jieyi Dai. 2024. "Értóng fùzá jùfă xídé: Yũyán yǔ rènzhī de jiāohuì [Children's acquisition of complex syntax: The intersection of language and cognition]." In Looking at Language from All Sides, ed. by James Myers and James H.Y. Tai, 295-330. Taipei: The Crane Publishing Company.
- Lin, Jingxia. 2019. Encoding Motion Events in Mandarin Chinese. Amsterdam: John Benjamins.
- Liu, Yuehua 刘月华. 2006. *Qūxiàng bǔyǔ tông shì* [An Explanation of Directional Complements in Chinese]. Beijing: Beijing Language and Culture University Press.
- Liu, Yuehua 刘月华, Wenyu Pan 潘文娱, and Wei Gu 故伟. 2001. *Shíyòng xiàndài hànyǔ yǔfǎ* [Practical Modern Chinese Grammar]. Beijing: Shangwu Yinshuguan.
- Lü, Shuxuang 吕叔湘. 1979. Hànyǔ yǔfǎ fēnxī wèntí [Issues in the grammatical analysis of Chinese]. Beijing: Shangwu Yinshuguan.
- Masini, Federico, Tongbing Zhang, Hua Bai, Anna Di Toro, and Dongmei Liang. 2010. ll cinese per gli italiani. Vol. 1-2. Milano: Hoepli.
- Masini, Federico, hiara Romagnoli, Tongbing Zhang, and Yafang Chang. 2021. *Comunicare in cinese*. Vol. 1-2. Milano: Hoepli.
- Mayer, Mercer. 1969. Frog, Where Are You? New York: Dial Press.
- Nakazawa, Tsuneko. 2007. "A typology of the ground of deictic motion verbs as path-conflating verbs: The speaker, the addressee, and beyond." *Poznań Studies in Contemporary Linguistics* 43(2): 59–82.
- Ozcalışkan, Şeyda. 2004. "Encoding the manner, path, ground components of a metaphorical motion event." *Annual Review of Cognitive Linguistics* 2: 73–102.
- Paternicò, Luisa M., Valeria Varriano, and Huiting Tian. 2021. *Grammatica della lingua cinese*. Novara: UTET Università.
- Paul, Waltraud. 2008. "The serial verb construction in Chinese: A tenacious myth and a Gordian knot." Linguistic Review 25 (3-4): 367-411.
- Perissutti, Anna-Maria. 2012. "Problemi di acquisizione del ceco da parte di parlanti di madrelingua italiana: il caso dei verbi di moto." *Lingue antiche e moderne* 1: 55-72.
- Peyraube, Alain. 2006. "Motion events in Chinese. A diachronic study of directional complements." In *Space in Languages: Linguistic Systems and Cognitive Categories*, ed. by Maya Hickmann and Stéphane Robert, 121-135. Philadelphia: John Benjamins.
- Rappaport Hovav, Malka, and Beth Levin. 2010. "Reflections on Manner/Result Complementarity." In *Lexical Semantics and Event Structure Syntax*, ed. by Edit Doron, Malka Rappaport Hovav, 21–38. Oxford: Oxford University Press.
- Romagnoli, Chiara, and Jing Wang. 2016. Grammatica d'uso della lingua cinese: Teoria ed esercizi. Milano: Hoepli.
- Schwarze, Christoph. 1985. "«Uscire» e «andare fuori»: struttura sintattica e semantica lessicale." In Sintassi e morfologia della lingua italiana d'uso. Teorie e applicazioni descrittive, ed. by Annalisa Franchi De Bellis and Leonardo Maria Savoia, 355-371. Roma: Bulzoni.
- Simone, Raffaele. 1997. "Esitono verbi sintagmatici in italiano?" In Lessico e Grammatica. Teorie linguistiche e applicazioni lessicografiche. Atti del convegno internannuale della Società di Linguistica Italiana (SLI), Madrid, 21-25 February 1995, ed. by Tullio De Mauro and Vincenzo Lo Cascio, 155-170. Roma: Bulzoni.
- Slobin, Dan. 1987. "Thinking for Speaking." In Proceedings of the Thirteenth Annual Meeting of the Berkeley Linguistics Society, ed. by Jon Aske, Natasha Beery, Laura Michaelis, and Hana Filip, 435-445. Berkeley: Berkeley Linguistics Society.

- Slobin, Dan. 2004. "The many ways to search for a frog: Linguistic typology and the expression of motion events." In *Relating Events in Narrative: Typological and Contextual Perspectives*, ed. by S. Strömqvist and L. Verhoeven, 219-257. Mahwah: Erlbaum.
- Slobin, Dan. 2006. "What Makes Manner of Motion Salient? Explorations in Linguistic Typology, Discourse, and Cognition." In Space in Languages: Linguistic Systems and Cognitive Categories, ed. by Maya Hickmann and Stéphane Robert, 59-81. Amsterdam: John Benjamins.
- Tai, James H.Y. 2003. "Cognitive Relativism: Resultative Construction in Chinese." *Language and Linguistics* 4 (2): 301-316.
- Talmy, Leonard. 1985. "Lexicalization patterns: Semantic structure in lexical forms." In Language Typology and Syntactic Description, ed. by Timothy Shopen, 57-149. Cambridge: Cambridge University Press.
- Talmy, Leonard.1991. "Path to Realization: A Typology of Event Conflation." In *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society*, ed. by Laurel A. Sutton, Cristopher Johnson, and Ruth Shields, 480-519. Berkeley: Berkeley Linguistics Society.
- Talmy, Leonard. 2000. Toward a Cognitive Semantics. Vol. 2. Cambridge: MIT Press.
- Wen, Xu, and Xinxin Shan. 2021. "The adventure of a third way: Motion events in Mandarin." *Language Sciences* 85: 1-24.
- Yang, Ning, and Geertje van Bergen. 2007. "Scrambled objects and case marking in Mandarin Chinese." *Lingua* 117: 1617–1635.
- Zhang, Jie. 2011. Acquisition of the Chinese resultative verb complements by learners of Chinese as a foreign language: A learner corpus approach. PhD diss., Pennsylvania State University.
- Zhu, Dexi 朱德熙. 1982. Yǔfă Jiǎngyì [On Grammar]. Beijing: Shangwu Yinshuguan.