The End of Some Events:
The Verbal Suffix *-Dao* in Mandarin Chinese

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Abstract

In this study, I examine the syntactic and semantic properties of the so-called result complement *-dao* in Mandarin Chinese and its interactions with different types of verbs. In particular, I use *-dao* as a new diagnostic tool to re-examine the traditional verb classification based on their (in)compatibility with *–dao*, as there appear to be several sets of counterexamples. Looking at more data, I show that the seeming counterexamples can be attributed to the systematic structural analysis of *-dao*, without resorting to any idiosyncratic properties of verbs. Adopting the Probe-Goal system of Chomsky (2000) and the notion of an a-categorial root from Distributed Morphology (e.g., Halle and Marantz, 1993), I suggest that two different syntactic structures are associated with *-dao*. One is the object-introducing *-dao* that attaches to motion verbs; the other is the telicity-checking *-dao* that attaches to other transitive activity verbs.

Keywords: lexical semantics, telicity, verb types, syntax, Mandarin Chinese

1. Introduction

Traditionally, the verbal suffix *–dao* 'arrive/reach/to' in Mandarin Chinese (MC) has been treated as a result complement in resultative verb compounds (RVCs), as it brings about the result of an action or process which is conveyed by the preceding predicate (e.g., Chao, 1968; Li and Thompson, 1981; Lin, 2004; Tham, 2009).[1] Compare (1a) with (1b). With the presence of the verbal suffix *–dao*, the sentence in (1a) indicates the result of *looking for Lisi*, whereas the sentence in (1b) does not have such a result reading.

(1) a. Zhangsan zhao-*dao* Lisi le.

[1] Abbreviations: CL: classifier; PFV: perfective aspect; PNM: prenominal modifier element; PROG: progressive aspect; SPF: sentence final particle.

Zhangsan look.for-reach Lisi SFP
'Zhangsan found Lisi (as a result of searching for him).'

b. Zhangsan (zai) zhao Lisi.
Zhangsan (PROG) look.for Lisi
'Zhangsan was looking for Lizi.'

As a corollary, adding a clause that means a continuation to the example in (1a) results in a semantic anomaly, as shown in (2). [2,3]

(2) #Zhangsan zhao-*dao* Lisi le, danshi ta hai
Zhangsan look.for-reach Lisi SFP but he still
zai zhao Lisi.

[2] This semantic property differs from what the perfective aspect *–le* does in MC. When the perfective aspect *–le* attaches to an accomplishment predicate such as *write a letter*, the event denoted by the predicate is still not complete (e.g., Comrie, 1976; Li and Thompson, 1981; Tai, 1984; Smith, 1991; Lin, 2002; Soh and Kuo, 2005; among others). Thus, the sentence still sounds perfect even with the addition of a clause that indicates a lack of completion, as shown in (i) (Tai, 1984: 292):

(i) Wo zuotian xie-*le* yi-feng xin, keshi mei xie-wan.
I yesterday write-PFV one-CL letter but not write-finish
'I wrote a letter yesterday, but I didn't finish writing it.'

Also, although having some aspectual meanings, -*dao* is not like typical aspectual markers such as progressive *zai*-, durative *zhe*, or experiential *guo* in MC. On the one hand, -*dao* can co-occur with the perfective aspect *–le*, and the perfective has to come after -*dao*, as in (ii).

(ii) Zhangsan kan-*dao*-le Lisi.
Zhangsan look-reach-PFV Lisi
'Zhangsan saw Lisi.'

On the other hand, the set of verb classes that can co-occur with -*dao* is comparatively restricted, which is not commonly seen in other aspectual markers. This point will be discussed in detail in section 3.

[3] In this paper, I use a hash mark # to indicate that a sentence is semantically anomalous, and use the star symbol * to indicate that a sentence is ungrammatical.

PROG look.for Lisi
#‘Zhangsan found Lisi, but he is still searching for Lisi.’

Despite *-dao*’s status as a result complement, there are several intriguing properties that emerge when we look at its interaction with different types of verbs, which have not been examined thoroughly in the past. For example, *-dao* cannot occur with some psych verbs such as *hen* ‘hate,’ as in (3a), but it can occur with others such as *xia* ‘frighten,’ as in (3b).[4]

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[4] In this paper, the sentence final particle *le* sometimes seems to be obligatory and sometimes optional. This fact, I attribute to what Tsai (2008) calls ‘incompleteness effect’ in Chinese. That is, even when a sentence is inflected with an aspectual meaning on the surface, native Chinese speakers still ‘feel’ that it lacks the ability to stand alone, as in (i) (Tsai 2008: 677; % is used by Tsai to indicate incompleteness).

(i) %Akiu na-le shu.
Akiu take-PFV book
‘Akiu took books.’

To make the sentence self-sufficient, one can use several strategies including adding a temporal adverbial *xiawu* ‘afternoon’ to it, as in (ii), or adding a sentence final particle *le* to it, as in (iii) (Tsai 2008: 678):

(ii) Akiu xiawu na-le shu.
Akiu afternoon take-PFV book
‘Akiu took books this afternoon.’

(iii) Akiu na-le shu le.
Akiu take-PFV book SFP
‘(As for now), Akiu has taken the book.’

Notice that in (ii) there are two occurrences of *le*, one attaching to the main verb *na* ‘take’ and the other occurring in the sentence final position. Although they share the same spelling and the same pronunciation, they have different meanings. The verbal suffix *–le* describes perfectivity of a situation (Chao, 1968; Li and Thompson, 1981, Zhu, 1982), and the sentence final *le* describes inchoativity or change of state (Zhu 1982). According to Tsai, it is the sentence final *le*, but not the verbal suffix *le*, that can be used to remove the incompleteness effect. Also, since it does not affect the grammaticality of a V-*dao* complex predicate whether the complex predicate is attached to the verbal suffix *–le*, as in (iva), or the sentence final *le*, as in (ivb), therefore, in this paper, I simply

(3) a. *Zhangsan hen-*dao* Lisi le.
Zhangsan hate-reach Lisi SFP
Intended: 'Zhangsan hates Lisi.'
b. Zhangsan xia-*dao* Lisi le.
Zhangsan frighten-reach Lisi SFP
'Zhangsan frightened Lisi.'

Moreover, whereas *-dao* is compatible with some activity verbs, such as *pao* 'run,' as in (4a), it cannot occur with other activity verbs such as *likai* 'leave,' as in (4b).

(4) a. Zhangsan pao-*dao*-le xuexiao.
Zhangsan run-reach-PFV school
'Zhangsan ran to school.'
b. *Zhangsan likai-*dao*-le xuexiao.
Zhangsan leave-reach-PFV school
Intended: 'Zhangsan left school.'

At first sight, these properties seem to be idiosyncratic and therefore one may simply resort to the classical subcategorization analysis. However, as more data is presented, I will demonstrate that a systematic structural analysis is more feasible.

Thus, the focus of this paper is to use *-dao* as a new diagnostic tool to re-examine the traditional verb classification based on their (in)compatibility with *–dao*. For expository purposes, I will, from now on, call the compound that contains this verbal suffix *-dao* a V-*dao* complex predicate. I begin with a general discussion of verb classes in MC in section 2. In section 3, I provide a list of data that illustrate some restrictions on V-*dao* complex predicates with respect to a more fine-grained classification of verbs. In section 4, I show that all of the structures that occur in V-*dao* complex predicates can be subsumed under a simple description. Specifically, adopting the Probe-Goal system framed in the Minimalist Program (Chomsky, 2000) and the notion of an a-categorial

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use the sentence final particle *le* as a strategy to get rid of the incompleteness effect, and nothing else is implied.

(iv) a. Zhangsan zhao-*dao*-le Lisi.
Zhangsan look.for-reach-PFV Lisi
'Zhangsan found Lisi.'
b. Zhangsan zhao-*dao* Lisi le.
Zhangsan look.for-reach Lisi SFP
'Zhangsan found Lisi.'

root from Distributed Morphology (Halle and Marantz, 1993; Harley and Noyer, 1999; Embick and Noyer, 2007; among others), I argue that there are two different syntactic structures associated with *-dao*. One is the object-introducing *-dao* that occurs with motion verbs; the other is the telicity-checking *-dao* that occurs with other transitive activity verbs. Section 5 concludes this paper.

2. Verb Classes

In this section, I begin with a brief review of verb classes in both English and MC. Then, I point out the similarities and differences between these two languages based on previous studies. I further justify the verb classification in MC using three other independent tests (e.g., Tai, 1984; Lin, 2004).

2.1 Verb classes in English and MC

In English, it is typically assumed that there are at least four aspectual types of verbs and verb phrases (e.g., Vendler, 1967; Dowty, 1979; Smith, 1991; Rothstein, 2004). These are states, activities, accomplishments and achievements, as in (5):

(5) a. *States*: know, love, hate
b. *Activities*: walk, run
c. *Accomplishments*: build, destroy, paint a picture, draw a circle
d. *Achievements*: arrive, reach, win, see, hear, die

A stative verb like *know* denotes a stable property, and is generally not compatible with progressive aspect, as shown in (6):

(6) #John is knowing English.

In contrast, an activity verb such as *walk* denotes a dynamic property, and is compatible with progressive aspect, as in (7). Moreover, an activity usually does not entail an endpoint, so it is usually not compatible with a prepositional phrase that indicates a temporal boundary like *in two hours*, as in (8):

(7) John was walking.

(8) #John was walking *in two hours*.

An accomplishment predicate typically consists of a process and a result, such as *paint a picture*. In example (9), *paint* is an activity verb; it denotes an ongoing process, and *a picture* is the result of this painting. An accomplishment is compatible with

progressive aspect, as in (9). Also, since an accomplishment has an endpoint, it is compatible with the temporal phrase *in two hours*, as in (10).

(9) John was painting a picture.

(10) John painted a picture *in two hours*.

Achievements involve no process. They simply denote an endpoint, such as *arrive*. As a result, they are not compatible with progressive aspect, as in (11).

(11) #John was arriving at the hotel.

In MC, it has been argued that monomorphemic verbs, with few exceptions, are either activities or states, and that accomplishments and achievements are always derived syntactically (e.g., Tai, 1984; Smith, 1991; Sybesma, 1997; Lin, 2004). Compare the English examples in (12) with their MC counterparts in (13). In English, there is a set of activity/achievement pairs of verbs where verbs have similar meanings with a difference only in telicity.

English

(12)

activity	*achievement*
look (at)	see
listen (to)	hear
study	learn
look for	find

(Lin 2004: 61)

However, there is no such pair of verbs in MC. As (13) shows, to get an achievement, one needs to add a verb complement that indicates an endpoint to the activity verb.

MC

(13)

activity		*achievement*	
kan	'look'	kan-jian/dao	'look-perceive/arrive' = see
ting	'listen'	ting-jian/dao	'listen-perceive/arrive' = hear
xue	'study'	xue-hui	'study-able' = learn
zhao	'look for'	zhao-dao	'look.for-arrive' = find

(Lin 2004: 62)

Thus, the major difference of verb types between English and MC is, whereas English normally can use simplex predicates to express accomplishments and

achievements, MC has to resort to complex predicates. In the next section, I show that three other tests can be used to distinguish these four types of verbs in MC.

2.2 States, Activities, Accomplishments and Achievements in MC

In MC, at least three tests can be used to distinguish different types of verbs. The first test is compatibility with the degree adverb *hen* 'very.' Only stative verbs can co-occur with the degree adverb, as in (14); the other three types of verbs cannot, as in (15) for activities, (16) for accomplishments and (17) for achievements.[5]

(14)	Zhangsan	*hen*	liaojie	Lisi.	(State)
	Zhangsan	very	understand	Lisi	

[5] Some might point out that the degree adverb *hen* 'very' can also occur with adjectives, and that the distinction between verbs and adjectives is a controversial issue in Chinese linguistics. One way to distinguish verbs from adjectives is to examine whether the predicate can stand alone (e.g., Zhu, 1982). Adjectival predicates cannot stand alone, as in (ia); they usually require a degree adverb such *hen* 'very,' as in (ib). In contrast, a degree adverb is not required in stative verbs, as in (iia), and is sometimes not allowed, as in (iib).

(i) a. *Zhangsan congming/shuai/kuaile.
Zhangsan smart/handsome/happy
Intended: 'Zhangsan is smart/handsome/happy.'

b. Zhangsan hen congming/shuai/kuaile.
Zhangsan very smart/handsome/happy
'Zhangsan is (very) smart/handsome/happy.'

(ii) a. Zhangsan (hen) xihuan Lisi.
Zhangsan very like Lisi
'Zhangsan likes Lisi (very much).'

b. Zhangsan (*hen) zhidao zhe-ge ren.
Zhangsan very know this-CL person
'Zhangsan knows this person (very much).'

Readers who are interested in adjectival predicates in Chinese are also referred to Liu (2010); he has a very detailed and insightful analysis of the licensing of adjectival predicates in Chinese.

'Zhangsan understands Lisi very much.'

(15)	*Zhangsan	*hen*	youyong.	(Activity)
	Zhangsan	very	swim	

(16)	*Zhangsan	*hen*	chi	yi-wan	fan.	(Accomplishment)
	Zhangsan	very	eat	one-CL	rice	

(17)	*Zhangsan	*hen*	si.	(Achievement)
	Zhangsan	very	die	

The second is a progressive test. Activities such as *paobu* 'run' and accomplishments such as *xie yi-feng xin* 'write a letter' can occur with the progressive aspect marker *zai*, as in (18) and (19), respectively. In contrast, states such as *ai* 'love,' as in (20), and achievements such as *ying zhe-chang bisai* 'win the game,' as in (21), are not compatible with progressive aspect.[6]

(18)	Zhangsan	zai	paobu.	(Activity)
	Zhangsan	PROG	run	
	'Zhangsan is running.'			

(19)	Zhangsan	zai	xie	yi-feng	xin.	(Accomplishment)
	Zhangsan	PROG	write	one-CL	letter	
	'Zhangsan is writing a letter.					

(20)	*Zhangsan	zai	ai	Lisi.	(State)
	Zhangsan	PROG	love	Lisi	

[6] Although a resultative verb compound in MC like *sha-si* 'kill-dead,' as in (ia), is considered an accomplishment in some works (e.g., Tai (1984) and Lin (2004) take RVCs as accomplishments; Huang (1997, 2006) and Lin (2001)) take RVCs as causatives/inchoatives), unlike other accomplishments, however, it cannot go with progressive aspect, as in (ib). For the present purpose, I still take RVCs as accomplishments in this paper.

(i)	a.	Zhangsan	sha-si	Lisi	le.	
		Zhangsan	kill-dead	Lisi	SFP	
		'Zhangsan killed Lisi.'				
	b.	*Zhangsan	zai	sha-si	Lisi.	
		Zhangsan	PROG	kill-dead	Lisi	
		Intended: 'Zhangsan is killing Lisi.'				

Intended: *Zhangsan is loving Lisi.

(21) *Zhangsan zai ying zhe-chang bisai. (Achievement)
Zhangsan PROG win this-CL game
Intended: ‘Zhangsan is winning the game.’

One more test that can be used to distinguish activities and accomplishments from states and achievements is compatibility with imperatives. In MC, to form an imperative, one simply uses a verbal predicate; there is no need to add any additional morpheme to the predicate. In (22), an activity *pao* ‘run’ is in the imperative context, and the sentence is perfect. Similarly, an accomplishment may occur in the imperative form, and the sentence is fine, as in (23). However, states, as in (24), and achievements, as in (25), are not compatible with the imperative form.

(22) pao! (Activity)
run
‘Run!’

(23) qie-kai zhe-ge xigua! (Accomplishment)
cut-open this-CL watermelon
‘Cut this watermelon!’

(24) *zhidao daan! (State)
know answer
Intended: *’Know the answer!’

(25) *kan-jian Lisi! (Achievement)
look-perceive Lisi
Intended: *‘See Lisi!’

In summary, I have shown some characteristics of each verb class in MC. Generally, monomorphemic verbs are activities and states, and accomplishments and achievements are derived syntactically. In addition, I use three tests to distinguish these four types of verbs. The table in (26) demonstrates the characteristics of each type of verb based on the above tests.

(26) Table 1

	Primitives	Syntactically Derived

Situation Types vs. Tests	States	Activities	Accomplishments	Achievements
(1) degree adverb *hen* 'very'	OK	*	*	*
(2) progressive aspect *zai*	*	OK	OK (not RVCs)	*
(3) imperative context	*	OK	OK	*

In the next section, I use these relevant characteristics as the basic criteria to distinguish verb classes from each other, and show how different verb classes behave when occurring with the verbal suffix -*dao*.

3. Restrictions on V-*Dao* Complex Predicates

There are two main parts in this section. In section 3.1, I discuss the restrictions on verbs preceding -*dao* in terms of their lexical semantics. In section 3.2, I deal with the fact that the occurrence of -*dao* also depends on the argument structure of a verb.

3.1 The interaction between -dao and the lexical semantics of verbs

Activity verbs are generally compatible with -*dao*, such as *da* 'beat' in (27). Stative verbs, on the contrary, are not compatible with -*dao*, as in (28). As for derived accomplishments and achievements, they are not compatible with -*dao*, either. For example, *da-po* 'hit-break' in (29) is an accomplishment, and cannot occur with -*dao*; *dida jichang* 'arrive at the airport' in (30) is an achievement, and adding -*dao* to the sentence also makes it ill-formed.

(27) Zhangsan da-*dao* Lisi le. (Activity)
Zhangsan beat-reach Lisi SFP
'Zhangsan beat Lisi.'

(28) *Zhangsan zhidao-*dao* Lisi (le). (State)
Zhangsan know-reach Lisi (SFP).
Intended: 'Zhangsan knows Lisi.'

(29) *Zhangsan da-po-*dao* boli. (Accomplishment/RVC)
Zhangsan hit-break-reach glass

Intended: ‘Zhangsan broke the glass as a result of hitting it.’

(30) *Zhangsan dida-*dao* jichang le. (Achievement)
Zhangsan arrive-reach airport SFP
Intended: ‘Zhangsan arrived at the airport.’

Despite the general pattern that these four types of verbs exhibit with respect to -*dao*, there appear to be several sets of counterexamples to this verb classification. First, consider psych verbs. There are at least two types of psych verbs (Belletti and Rizzi, 1988; Pustejovsky, 1991; among others). One type of psych verb takes the subject as Experiencer, such as *fear* in (31). In this example, the person who experiences the fear is the subject *John*, and the object *Mary* is the one who (indirectly or directly) causes such fear to *John*. In contrast, the other type of psych verb takes the object as Experiencer, such as *frighten* in (32). The subject *John* is the one who leads to the fear to the object *Mary*, and *Mary* is the one who feels, or experiences the fear.

(31) John fears Mary.

(32) John frightens Mary.

This distinction of psych verbs matters when -*dao* is concerned. On the one hand, -*dao* cannot occur with Experiencer subject psych-verbs, such as *ai* ‘love,’ *hen* ‘hate’ and so forth. Here is a list of examples of psych verbs in which the subject functions as Experiencer:

(33) a. *Zhangsan**[Experiencer]** ai-*dao* Lisi**[Theme]** (le).
Zhangsan love-reach Lisi (SFP)
Intended: ‘Zhangsan loves Lisi.’
b. *Zhangsan**[Experiencer]** hen-*dao* Lisi**[Theme]** (le).
Zhangsan hate-reach Lisi (SFP)
Intended: ‘Zhangsan hates Lisi.’
c. *Zhangsan**[Experiencer]** tan-*dao* qian**[Theme]** (le).
Zhangsan greedy-reach money (SFP)
Intended: ‘Zhangsan is greedy for money.’
d. *Zhangsan**[Experiencer]** pa-*dao* Lisi**[Theme]** (le).
Zhangsan fear-reach Lisi (SFP)
Intended: ‘Zhangsan fears Lisi.’

Notice that this type of psych verb belongs to stative verbs, since they can occur with the degree adverb *hen* ‘very,’ as in (34).

(34) Zhangsan hen ai Lisi.
Zhangsan very love Lisi
'Zhangsan loves Lisi very much.'

On the other hand, verbs whose objects serve as Experiencer, such as *xia* 'frighten,' *gandong* 'touch,' can co-occur with *-dao*, as shown in (35):

(35) a. Zhangsan**[Theme]** xia-*dao* Lisi**[Experiencer]** (le).
Zhangsan frighten-reach Lisi (SFP)
'Zhangsan frightened Lisi.'
b. Zhangsan**[Theme]** jinu-*dao* Lisi**[Experiencer]** (le).
Zhangsan infuriate-reach Lisi (SFP)
'Zhangsan infuriated Lisi.'

Also, the subject of this type of psych verb may be ambiguous between a Theme role and an Agent role. For example, this type can occur with an agent-oriented adverb *guyi* 'deliberately' independently, as in (36), thus indicating that the role involved in the subject is Agent.

(36) a. Zhangsan**[Agent]** guyi xia Lisi**[Experiencer]**.
Zhangsan deliberately frighten-reach Lisi
'Zhangsan frightened Lisi intentionally.'
b. Zhangsan**[Agent]** guyi jinu Lisi**[Experiencer]**.
Zhangsan deliberately infuriate Lisi
'Zhangsan infuriated Lisi intentionally.'

Unlike psych verbs taking subjects as Experiencer, Experiencer object psych-verbs cannot occur with the degree adverb *hen* 'very,' as in (37), and they can be used with the progressive aspect marker *zai*, as in (38). Thus, all these facts suggest that Experiencer object psych-verbs are activities or accomplishments, but not states or achievements.

(37) *Zhangsan hen xia Lisi.
Zhangsan very frighten Lisi
Intended: 'Zhangsan frightens Lisi very much.'

(38) Zhangsan zai xia Lisi.
Zhangsan PROG frighten Lisi

'Zhangsan is frightening Lisi.'

Another constraint on the occurrence of -*dao* involves the type of activity verb that takes a so-called 'Incremental Theme' (e.g., Dowty, 1991; Krifka, 1989, 1998; Tenny, 1994; among others). *Dao* is generally incompatible with this type of verb. Specifically, an Incremental Theme is an object that serves to measure out the event. Thus, when there is a change of the object, there is also a change in the event involved, and when the object is consumed up or completed, the event is also completed, that is, reaching an endpoint. A typical example is *eat a cake*: the Incremental Theme is the quantifier noun phrase *a cake* and the verb involved is *eat*, as in (39). Thus, the more *John* ate this cake, the more the event of eating a cake is completed. Once the cake involved in this event is gone, the event is completed.

(39) John ate a cake.

Of interest here is the fact that -*dao* is generally not compatible with this type of verb, as shown in (40a-c):

(40) a. *Zhangsan chi-*dao* zhe-wan fan le.
Zhangsan eat-reach this-CL rice SFP
Intended: 'Zhangsan ate this bowl of rice.'

b. *Zhangsan xie-*dao* san-feng sin le.
Zhangsan write-reach three-CL letter SFP
Intended: 'Zhangsan wrote three letters.'

c. *Zhangsan gai-*dao* wu-dong fangzi le.
Zhangsan build-reach five-CL house SFP
Intended: 'Zhangsan built five houses.'

Now let's consider another type of activity verb: motion verbs. A motion verb can be considered a verb that describes an event in which the participant changes its direction or location. For example, *zou* 'walk' in (41) means *Zhangsan* has left, and therefore he is not in the original place any more.

(41) Zhangsan zou le.
Zhangsan walk SFP
'Zhangsan (walked away) left.'

There are at least two types of motion verbs that behave differently when co-occurring with -*dao*. One type takes a location as a direct object with the addition of -*dao*, as in

(42). The object of these verbs, such as *zou* 'walk,' *fei* 'fly,' and *pao* 'run,' usually denotes a Goal of the motion event (e.g., Tham 2009).

(42) a. Zhangsan zou-*dao* xuexiao**[Goal]** le.
Zhangsan walk-reach school SFP
'Zhangsan walked to school (and arrived at school already).'
b. gezi fei-*dao* wuding**[Goal]** le.
pigeon fly-reach roof SFP
'The pigeon flew to the roof (and arrived at the roof already).'
c. Zhangsan pao-*dao* gongyuan**[Goal]** le.
Zhangsan run-reach park SFP
'Zhangsan ran to the park (and was in the park already).'

Of particular interest here is that, -*dao* is obligatory when the motion verb takes the location object; without -*dao*, the sentence becomes ungrammatical, as in (43).

(43) *Zhangsan zou-le xuexiao.
Zhangsan walk-PFV school
Intended: 'Zhangsan walked to school.'

The second type of motion verb also takes a location as a direct object, but it cannot occur with -*dao*, as in (44). In fact, it can take a Source object without the insertion of any additional predicate, as in (45).

(44) *Zhangsan likai-*dao* xuexiao**[Source]** le.
Zhangsan leave-reach school SFP
Intended: 'Zhangsan left school.'

(45) Zhangsan likai xuexiao le.
Zhangsan leave school SFP
'Zhangsan left school.'

Another type of activity verb that shows interesting interactions with -*dao* is the transaction verb. According to Li & Thompson (1981), transaction verbs are verbs that involve either a Source from which this transaction takes place or a Goal where this transaction goes. Thus, there are at least two types of transaction verbs based on which thematic role this transaction focuses on. For example, whereas the subject of the verb *jie* 'borrow,' or *na* 'take' is a Goal, as in (46), the subject of the verb *gei* 'give,' or *song* 'give' is a Source, as in (47). Another way to look at this pair is that, while the indirect

object *Lisi* of the *borrow*-type of verbs denotes a Source, as in (46), the indirect object *Lisi* of the *lend*-type denotes a Goal, as in (47):

Transaction Vebs (Borrow-Type)

(46) a. Zhangsan gen Lisi**[Source]** jie yi-ben shu.
Zhangsan with Lisi borrow one-CL book
'Zhangsan borrowed a book from Lisi.'

b. Zhangsan gen Lisi**[Source]** na yi-ben shu.
Zhangsan with Lisi take one-CL book
'Zhangsan took a book from Lisi.'

Transaction Vebs (Lend-Type)

(47) a. Zhangsan jie Lisi**[Goal]** yi-ben shu.
Zhangsan jie Lisi one-CL book
'Zhangsan lent Lisi a book.'

b. Zhangsan song Lisi**[Goal]** yi-ben shu.
Zhangsan give Lisi one-CL book
'Zhangsan gave Lisi a book.'

However, although -*dao* can co-occur with the *borrow*-type verb, as in (48), it cannot co-occur with the *lend*-type verb, as in (49):

(48) a. Zhangsan gen Lisi jie-*dao* yi-ben shu.
Zhangsan with Lisi borrow-reach one-CL book
'Zhangsan borrowed a book from Lisi.'

b. Zhangsan gen Lisi na-*dao* yi-ben shu.
Zhangsan with Lisi take-reach one-CL book
'Zhangsan took a book from Lisi.'

(49) a. *Zhangsan jie-*dao* Lisi yi-ben shu.
Zhangsan lend-reach Lisi one-CL book
Intended: 'Zhangsan lent Lisi a book.'

b. *Zhangsan song-*dao* Lisi yi-ben shu.
Zhangsan give-reach Lisi one-CL book
Intended: 'Zhangsan gave Lisi a book.'

Now, this phenomenon becomes less mysterious than it appears to be if we apply the progressive aspect *zai*- test to both types. The *lend*-type cannot occur with progressive aspect, as in (50), but the *borrow*-type can, as in (51).

(50) *Zhangsan zai song Lisi yi-ben shu.

Zhangsan PROG give Lisi one-CL book
Intended: ‘Zhangsan is giving Lisi a book.’

(51) Zhangsan zai gen Lisi jie yi-ben shu.
Zhangsan PROG with Lisi borrow one-CL book
‘Zhangsan is borrowing a book from Lisi.’

All these contrasts suggest that the *lend*-type is more like an achievement than an activity, whereas the *borrow*-type is like an activity or an accomplishment.

Finally, let us look at two types of causatives, which are semantically taken as accomplishments or achievements (e.g., Dowty, 1979; Sybesma, 1992; among others). The first type is the matrix causative verb that takes an embedded propositional VP or TP describing the result of causation. These verbs include *shi* ‘make,’ as in (52a), or *rang* ‘let,’ as in (52b).

(52) a. Zhangsan shi Lisi da Wangwu.
Zhangsan make Lisi beat Wangwu
‘Zhangsan made Lisi beat Wangwu.’
b. Zhangsan rang Lisi pao le.
Zhangsan let Lisi run.away SFP
‘Zhangsan let Lisi run away.’

As shown in (53), -*dao* cannot attach to these clause-taking causative verbs.

(53) a. *Zhangsan shi-*dao* Lisi da Wangwu.
Zhangsan make-reach Lisi beat Wangwu
Intended: ‘Zhangsan made Lisi beat Wangwu (and succeeded in making Lisi do so).’
b. *Zhangsan rang-*dao* Lisi pao le.
Zhangsan let-reach Lisi run.away SFP
Intended: ‘Zhangsan let Lisi run away (and succeeded in making Lisi do so.)’

The second type of causative is a lexically causative verb, like *break* or *open*. In MC, this type of causative is typically represented by a resultative verb compound, as in (54).

(54) a. Zhangsan da-po-le huaping.
Zhangsan hit-break-PFV vase
‘Zhangsan broke the glass.’
b. Zhangsan da-kai-le men.

Zhangsan hit-open-PFV door
'Zhangsan opened the door.'

Like matrix causative verbs, they cannot attach to *-dao*, either, as in (55).

(55) a. *Zhangsan da-po-*dao* huaping.
Zhangsan hit-break-reach vase
Intended: 'Zhangsan broke the glass (and succeeded in breaking it).'
b. *Zhangsan da-kai-*dao* men.
Zhangsan hit-open-reach door
Intended: 'Zhangsan opened the door (and succeeded in opening it).'

In brief, in this section I have shown that *-dao* serves as a nice diagnostic tool to examine the telicity of verbs. Below is a table that illustrates which type of verb can co-occur with *-dao* and which type cannot.

(56) **Table 2**

Verb Types	**Compatible with -*Dao*?**
1. States	No
2. Activities	Yes
3. Accomplishments	No
4. Achievements	No
5. Psych Verbs I (Subject as Experiencer)	No (stative reading)
6. Psych Verbs II (Object as Experiencer)	Yes (activity or accomplishment reading)
7. Incremental Theme Verbs	No
8. Motion Verbs I (Goal as the Object)	Yes (*Dao* is obligatory.)
9. Motion Verbs II (Source as the Object)	No
10. Transaction Vebs I (*Borrow*-Type)	Yes (activity or accomplishment)
11. Transaction Verbs II (*Lend*-Type)	No (achievement)
12. Causatives (matrix causative verbs & lexically causative verbs)	No (accomplishment or achievement)

In the next section, I show that the verbs with different number of arguments, i.e., verbs having different argument structures, also behave differently when associated with *-dao*.

3.2 The interaction between -dao and the argument structure of verbs

The argument structure of a verb plays a role in determining whether -*dao* can co-occur with it or not. Specifically, I follow the conventional classification of verbs: transitive verbs, unergative verbs and unaccusative verbs.

The first type is the transitive verb. Transitive verbs normally take two arguments, and the subject is usually an Agent, as in (57):

(57) a. Zhangsan zai zhao Lisi.
Zhangsan PROG look.for Lisi
'Zhangsan is looking for Lisi.'
b. Zhangsan qin-le Lisi.
Zhangsan kiss-PFV Lisi
'Zhangsan kissed Lisi.'

Dao is compatible with a transitive verb, as in (58):

(58) a. Zhangsan zhao-*dao* Lisi le.
Zhangsan look.for-reach Lisi SFP
'Zhangsan found Lisi.'
b. Zhangsan qin-*dao* Lisi le.
Zhangsan kiss-reach Lisi SFP
'Zhangsan kissed Lisi.'

The second type is the intransitive verb. According to the Unaccusative Hypothesis (Perlmutter 1978), intransitive verbs can be further divided into two kinds: unaccusatives and unergatives. Whereas an unaccusative is considered to involve an internal argument but no external argument, an unergative is associated with an external argument but no internal argument. A typical test to distinguish these two types of intransitives in English is to use *there-insertion*. An unaccusative verb such as *come* can be used in the *there*-insertion construction, as in (59a-b), but an unergative verb such as *laugh* cannot, as in (60a-b):

(59) a. A dog came.
b. There came a dog.

(60) a. A man laughed.
b. *There laughed a man.

This classification of intransitives is also adopted in MC in previous studies (see Lin, 2001; Huang, 2006; Yang, 2009; among others). Following this line of thought, though, I do not see any difference when either unergatives or unaccusatives occur with -*dao*, since neither of them is compatible with -*dao*, as shown in (61) and (62), respectively:

(61) a. *Zhangsan xiao-*dao* le.
Zhangsan laugh-reach SFP
Intended: 'Zhangsan laughed.'
b. *Zhangsan ku-*dao* le.
Zhangsan cry-reach SFP
Intended: 'Zhangsan cried.'

(62) *Zhangsan lai-*dao* le.
Zhangsan come-reach SFP
Intended: 'Zhangsan came.'

In addition, the typical change-of-state unaccusative verbs such as *kai* 'open' in (63b), which alternates with its causative counterpart *da-kai* 'open' in (63a), cannot occur with -*dao*, either, as shown in (63c).

(63) a. Zhangsan da-kai-le men.
Zhangsan hit-open-PFV door
'Zhangsan opened the door.'
b. men kai le.
door open SFP
'The door opened.'
c. men kai-(**dao*) (le).
door open-reach SFP
Intended: 'The door opened.'

However, when it comes to the Experiencer object psych-verb which also exhibits the causative-unaccusative alternation like *xia* 'frighten' in (64a-b), the unaccusative verb *xia* must occur with -*dao*, as in (64b).

(64) a. Zhangsan xia-*dao* Lisi le.
Zhangsan frighten-reach Lisi SFP
'Zhangsan frightened Lisi.'
b. Lisi xia-*(*dao*) le.
Lisi frighten-reach SFP
'Lisi was frightened.'

In sum, while a transitive verb can co-occur with -*dao*, intransitive verbs, either unergatives or unaccusatives, cannot co-occur with -*dao* except the unaccusative Experiencer object psych-verb. Below is a modified table from Table 2 in (56), which shows which verb class is compatible with -*dao* and which is not in terms of their lexical semantics and argument structure.

(65) **Table 3**

Verb Types	Transitive/Intransitive	Compatible with -*Dao*?
1. States	Transitive (e.g., psych-verbs I: subjects as Experiencer)	No
	Intransitive	No
2. Activities	Transitive	Yes
	Intransitive (e.g., unergatives, unaccusatives)	No
3. Accomplishments	Transitive (e.g., causatives,)	No
	Intransitive (e.g., one-argument RVCs)	No
4. Achievements	Transitive (e.g., transaction verbs II: the *lend* type)	No
	Intransitive	No
5. Psych Verbs II (Object as Experiencer)	Transitive	Yes
	Intransitive: (e.g. originally the object)	Yes
6. Incremental-Theme Verbs	Transitive	No
	Intransitive: NA[7]	NA
7. Motion Verbs I (Goal as the object)	Transitive	Yes
	Intransitive (e.g., when omitting the Goal object)	Yes
8. Motion Verbs II (Source as the object)	Transitive	No
	Intransitive (e.g., when omitting the Source object)	No
9. Transaction Verbs I (*Borrow* Type)	Transitive	Yes
	Intransitive: NA	NA

4. The Proposal

[7] This will be further discussed and revised in section 4.4.

In this section, I start with an overview of V-*dao* complex predicates and then provide the analysis of V-*dao* complex predicates.

4.1 An overview of the V-dao complex predicate

In section 3, I have shown that the occurrence of -*dao* depends on both the semantics and the syntax of verbs preceding it. In terms of semantics, -*dao* can attach to activity verbs in general, but cannot attach to stative verbs, accomplishments including activity verbs taking Incremental Theme objects, and achievements. In terms of syntax, -*dao* only attaches to transitive verbs. The interaction of verbs and -*dao* thus opens a window on the syntax-semantics interface and the lexicon-syntax interface. In the syntax-semantics interface, on the one hand, there is a correlation between the telicity-denoting -*dao* and the presence of a direct object. In the lexicon-syntax interface, on the other hand, there are several restrictions on verbs preceding -*dao*. The lexicalist view on these verbal restrictions would be that there is merely a list of items in the lexicon, and that each item would specify their compatibility, or, incompatibility with the co-occurrence of -*dao* or the meaning of endpoint. However, were it the case, this would not only put much burden in the lexicon, but also lead to much redundancy. For example, accomplishments are usually derived from an activity verb and an endpoint-denoting phrase in MC, and because of this property, inherently an activity can continue to be an activity or take an endpoint to become an accomplishment. If it chooses to take an endpoint, then a question immediately raised is which particular endpoint it should choose, among so many possible endpoint-denoting elements including result complements, perfective aspect, Incremental Themes, -*dao* and so forth. In contrast, the constructionalist position on this problem would be to postulate different functional or aspectual structures for verbs, and the functional structure will help to decide on the interpretation of arguments.

In view of these drawbacks to the lexicalist approach, I would like to explore a non-lexicalist approach to -*dao*. In the next section, I review some relevant properties of the adopted frameworks in order to pave the way for the analysis of V-*dao* complex predicates.

4.2 The probe-goal system and the a-categorial root

To begin with, I adopt Chomsky's (2000) Minimalist Program, assuming that there is a Probe-Goal system. Along this line of thought, I assume that grammars sometimes have imperfections, such as uninterpretable features, and that certain mechanisms such as Agree are required in order to get rid of these imperfections. Thus, uninterpretable features render a goal active, and a probe of matching features seeks a goal. Once this

matching pair induces Agree, the uninterpretable features of probe and goal are erased. Furthermore, if this feature is [+strong], then this Agree must not wait until LF.

Moreover, from Distributed Morphology (Halle and Marantz, 1993; Harley and Noyer, 1999; Embick and Noyer, 2007; among others), I adopt the notion that verbs decompose into a lexical a-categorial root and a verbalizing vP. In other words, roots do not contain grammatical features and may correspond to language-specific concepts, such as √CAT, √DOG, √SIT and so on.

In the following, I lay out the analysis of V-*dao* complex predicates based on these two important notions.

4.3 The analysis of V-dao complex predicates

Several studies have pointed out that there is a strong connection between telicity and direct objects (Tenny, 1994; Levin and Rappaport Hovav, 1995; Rosen, 1999; van Hout, 2004). Rosen (1999) shows that the addition of a direct object can change the event type from an activity to an accomplishment. This is illustrated in (66).

(66) a. Bill ran for 5 minutes/*in 5 minutes. (Activity)
b. Bill ran the mile *for 5 minutes/in 5 minutes. (Accomplishment)

Also, van Hout (2004) has shown that in Dutch, variable-behavior verbs can yield telicity only when they appear in a transitive, but not an intransitive frame. The variants of *schrijven* 'write' can appear in an intransitive frame, as in (67a), or in a transitive frame, as in (67b), but the temporal modifiers indicate that only the latter is telic.

(67) a. Elena heeft jarenlang/*binnen een jaar geschreven.
Elena has years-long/within a year written
'Elena has been writing for years/*within a year.'
b. Elena heeft haar proefschrift *jarenlang/binnen een jaar
Elena has her dissertation years-long/within a year
geschreven.
written
'Elena has written her dissertation *for years/within a year.'
(van Hout 2004: 62)

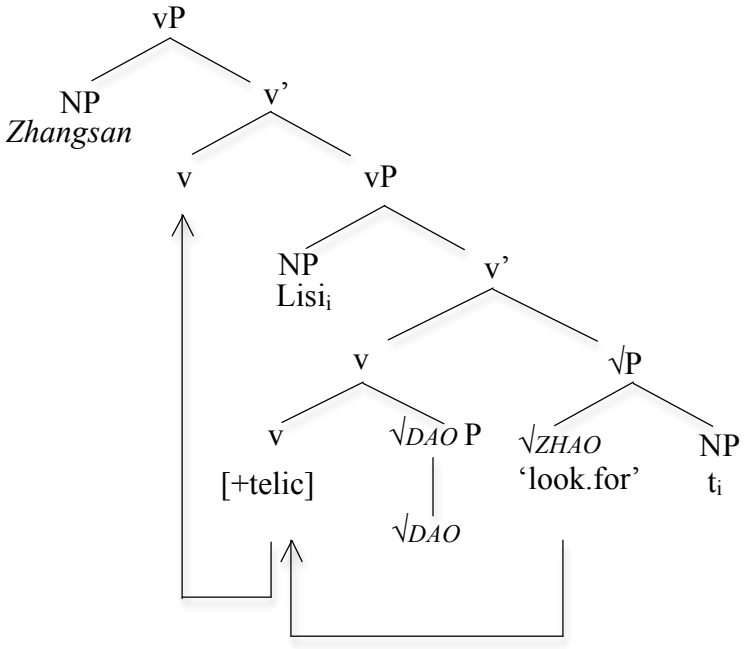
Van Hout accounts for this generalization by proposing that the aspectual feature of telicity has to be checked in object position. In particular, telicity checking takes place in AgrOP.

Although the focus of Van Hout's work is to explain the strong correlation between telicity and unaccusativity, I adopt the view that there is also a telicity feature checking

relation in MC. Specifically, to account for the telic interpretation of V-*dao* complex predicates, I propose that -*dao* is headed by a light verb that has the aspectual feature of telicity, and that the telicity feature must be checked in object position. A natural consequence of this approach is that it explains the fact that -*dao* must co-occur with a verb that takes a direct object. I furthermore propose that there are two syntactic structures associated with V-*dao* complex predicates: -*dao* attaching to transitive activity verbs and -*dao* attaching to motion verbs. Transitive activity verbs such as *zhao* 'look for' in (68) correspond to the syntactic structure in (69).

(68) Zhangsan zhao-*dao* Lisi le.
Zhangsan look.for-reach Lisi SFP
'Zhangsan found Lisi (as a result of searching for him).'

(69) -*dao* with transitive activity verbs

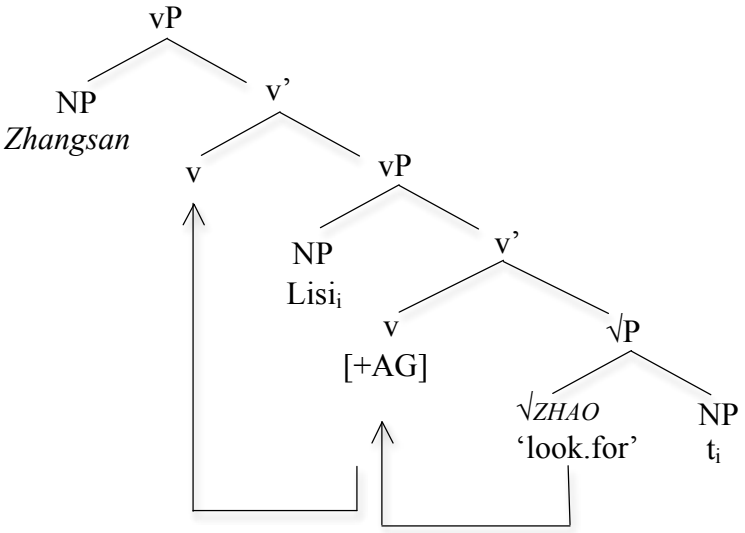


In this structure, the object NP *Lisi* moves to the specifier of [+telic] vP to check the telic feature in v. In addition, there is V-to-V and V-to-v movement from the lower verb root to the higher v[+telic] that √DAO phrase (√DAO P) attaches to. The V-*dao* compound then moves to the highest v. Notice that the light verb that takes √P as complement is no different from a functional head that introduces an external argument in transitive verbs. Specifically, I adopt an approach along the lines of Hale and Keyser (1993), in which they argue that all transitive verbs consist of two separate heads. The main verb introduces the internal argument and projects to VP, and a separate head v^0 introduces the external argument and projects to vP. The idea that the external argument is

introduced by a separate head is also proposed independently in other works (e.g., *Voice* in Kratzer 1996, Alexiadou et al. 2006, *v* in Chomsky 1995, among others). However, the light verb that introduces a typical agentive subject, as in (70), is the v with an agentive feature, that is, v[+AG], as represented by the regular tree in (71).

(70) Zhangsan zhao-le Lisi.
Zhangsan look.for-PFV Lisi
'Zhangsan looked for Lisi.'

(71) regular v[+AG] in activity predicates



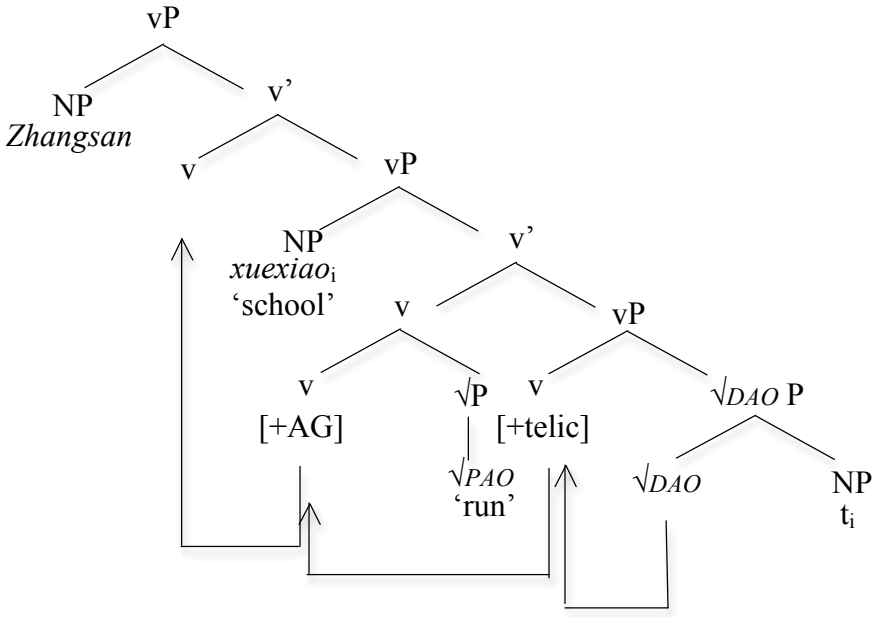
But the external-argument-selecting light verb involved in the V-*dao* complex predicate is v[+telic]; in other words, the little v in -*dao* constructions is not the usual agentive v, but another v that replaces the former v[+AG]. The idea that different light verbs select for different event structures is not new. For example, Folli et al. (2005) show that in Persian complex predicates, different light verbs determine the Agentivity/Causativity, Eventiveness or Duration of the complex predicates. Folli and Harley (2005) also provide evidence from Italian and English, arguing that there are both an agentive v that introduces an Agent and a causative v that introduces a Causer.

As for motion verbs such as *pao* 'run' that take -*dao*, as in (72), they correspond to the syntactic structure in (73).

(72) Zhangsan pao-*dao* xuexiao le.
Zhangsan run-reach school SFP

'Zhangsan ran to school.'

(73) -*dao* with motion verbs



In this structure, the higher [+telic] vP takes the lower verb phrase √DAO P as a complement. Under this structure, the lower verb phrase √DAO P has its own object. It is this object NP *xuexiao* 'school' which moves to spec of [+telic]vP to check the [+telic] feature. Also, there is V-to-V and V-to-v movement from the lower verb -*dao* to the higher v[+telic] that takes √DAO P as a complement. *Dao* then moves to the higher v[+AG], where they form a compound and further move up to the highest v.

There are two major differences between the structure in (69) and the one in (73). First, whereas √DAO P in (69) does not have any internal argument, √DAO P in (73) has an internal argument NP. Second, the v[+telic] taking √DAO P as complement in (69) is the *head* of the V-*dao* complex predicate, but in (73) the v[+telic] taking √DAO P as complement is *complement* to the complex predicate.

One piece of evidence that supports these two structures lies in the fact that transitive activity verbs can occur without -*dao*, as in (74), but motion verbs cannot, even with the addition of perfective aspect -*le*, as in (75).

(74) Zhangsan zhao-le Lisi.
Zhangsan look.for-PFV Lisi
'Zhangsan looked for Lisi.'

(75) *Zhangsan pao-le xuexiao.
Zhangsan run-PFV school

Intended: ‘Zhangsan ran to school/ran in school.’

Also, when -*dao* is removed, the sentence that contains the transitive activity verb occurring with the perfective aspect -*le* can only mean that an activity has been done, but whether a result has been reached is not known. As indicated in (74), this sentence means that *Zhangsan* has looked for *Lisi*, but it does not guarantee that *Zhangsan* found *Lisi*. In other words, the result is not reached when -*dao* is not added to the verb that denotes an activity. This indicates that the endpoint is introduced by -*dao* for transitive activity verbs. As for motion verbs like *pao* ‘run’ in (75), since the additional argument *xuexiao* ‘school’ cannot be introduced by ‘run’ itself, this indicates that the additional argument denoting the result in (72) is introduced by the √DAO root itself.

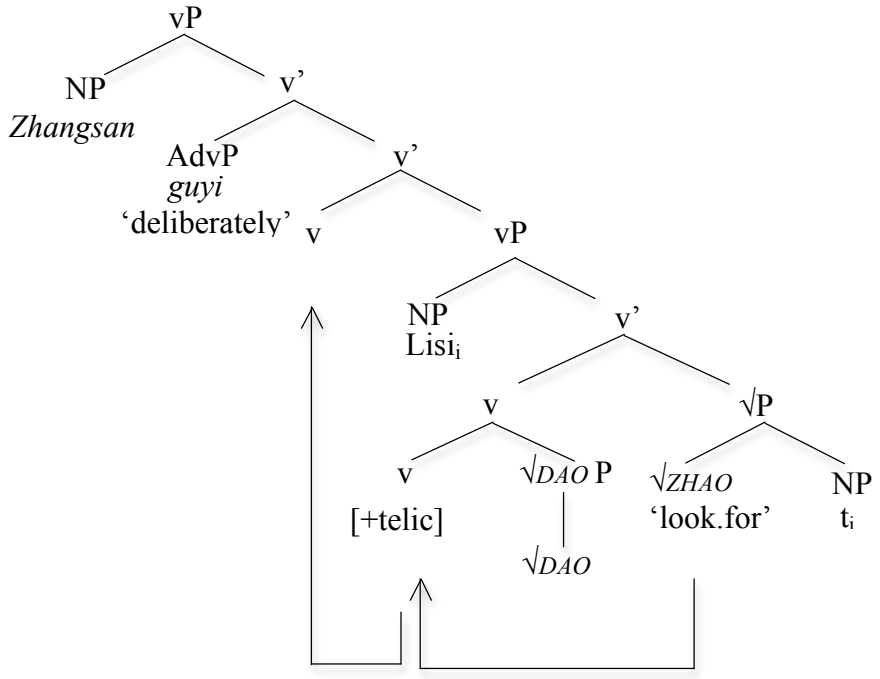
Another piece of evidence comes from the distribution of adverbials. While agent-oriented adverbs such as *guyi* ‘deliberately’ are ruled out with transitive activity verbs taking -*dao*, as in (76), they are well-formed with motion verbs taking -*dao*, as in (77).

(76) *Zhangsan guyi zhao-*dao*-le Lisi.
Zhangsan deliberately look.for-reach Lisi
Intended: ‘Zhangsan found Lisi deliberately (in order to...).’

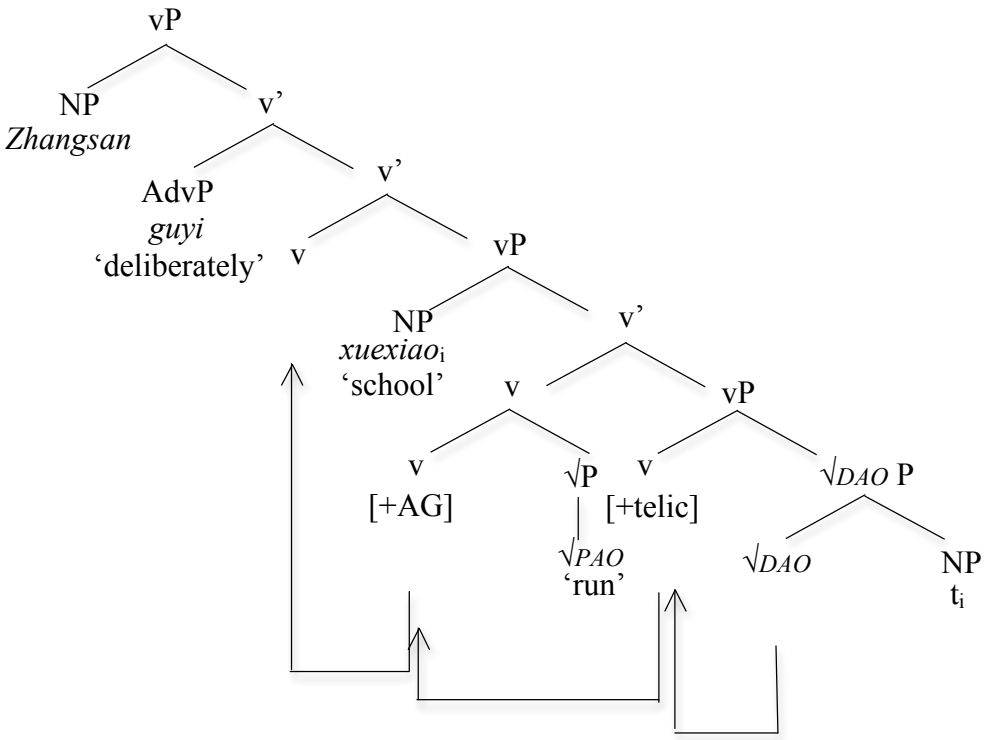
(77) Zhangsan guyi zou-*dao*-le xuexiao.
Zhangsan deliberately walk-reach school
‘Zhangsan walked to school deliberately (in order to…).’

This contrast shows that the subject of transitive activity verbs attaching to -*dao* is not an Agent, whereas the subject of motion verbs is considered an Agent. This can be accounted for if we assume that the adverb *guyi* ‘deliberately’ is adjoined to the matrix vP in both structures. Thus, the syntactic representation for transitive activity verbs with *guyi* is in (78) (modified from (69)); the syntactic structure for motion verbs with *guyi* is in (79) (modified from (73)):

(78) *transitive activity verbs with *guyi* ‘deliberately’



(79) motion verbs with *guyi* 'deliberately'



In the structure associated with transitive activity verbs attaching to *-dao*, the subject is base-generated in the specifier of a non-agentive vP, which is headed by the telicity-introducing v rather than the agentive v. As a result, the agent-oriented adverb is not compatible with these complex predicates. In contrast, the subject in the structure associated with motion verbs is base-generated in the specifier of an agentive vP; thus, the adverb can adjoin to the matrix vP.

To summarize, I propose that there are two different √DAO constructions. One *-dao* takes a direct object and occurs with motion verbs, and the other *-dao* only introduces an endpoint and checks the feature against a direct object, but does not introduce the direct object itself. The two *-dao*s have in common that they must check an endpoint feature against a direct object, but differ in the source of the direct object in question.

In the next section, I explain why verbs of certain lexical semantics are excluded from co-occurring with *-dao* based on the properties that *-dao* brings to the complex structure.

4.4 Explaining why some transitive verbs cannot co-occur with -dao

Here is a summary of verb types that are ruled out with *-dao*:

(80) a. States (e.g., change-of-state verbs, Experiencer subject psych-verbs);
b. Accomplishments (e.g., causatives, RVCs, activity verbs taking Incremental Theme objects);
c. Achievements (e.g., transaction verbs of the *lend*-type);
d. Motion verbs with Source as the direct object.

First, states are not eventive, so they are not compatible with the endpoint-denoting *-dao*.

Second, accomplishments and achievements differ from activities with respect to the endpoint/result state. Specifically, accomplishments and achievements both require a specified endpoint or result state, but activities do not. Moreover, since the former group belongs to the derived situation types in MC, this indicates that their result states must be explicitly specified in syntax. Therefore, the fact that these types of verbs are not compatible with *-dao* can be attributed to the redundancy problem. In other words, there is no need for the language to resort to one more mechanism, namely, *-dao*, to introduce the telicity if the endpoint/result state of the event has been explicitly specified by the verb complement, as in RVCs, or by the noun phrase that can serve to quantify an event, as in verbs taking Incremental Themes.[8]

[8] The issue whether the result state of accomplishments should be specified in syntax or semantics or both is not clear yet. In Wu (2005), he claims that the resultative

Now let us look at motion verbs that take Source as the direct object. As shown in (81), the motion verb *likai* 'leave' is a transitive verb by itself since it can take two arguments. Furthermore, the fact that the verb is well-formed with progressive aspect suggests that it can function as an activity, as in (82).

(81) Zhangsan likai-le xuexiao.
Zhangsan leave-PFV school
'Zhangsan left school.'

(82) Zhangsan (zheng)-zai likai xuexiao.
Zhangsan (right)-PROG leave school
'Zhangsan is leaving school.'

Due to these two properties, we would predict that this verb should be compatible with -*dao*. However, this prediction is not born out, as in (83).

(83) *Zhangsan likai-*dao*-le xuexiao.
Zhangsan leave-reach-PFV school
Intended: 'Zhangsan left school.'

What makes this kind of verb so special is that, it takes the kind of subject which Dowty (1991) calls Incremental Themes. Verbs such as *reach*, *leave*, *depart*, *abandon*, and *pass*, are said to have Incremental Theme subjects in that they help to measure out the event. As shown in (84), the direct object is considered a line rather than a region, and thus the subject that traverses it is taken as an Incremental Theme.

(84) She crossed the desert in a week.

Indeed, there are several verbs of this kind that do not go with -*dao*, as in (85).

(85) a. *Zhangsan guo-*dao*-le malu.
Zhangsan cross-reach-PFV road
Intended: 'Zhangsan crossed the road.'

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states of three subclasses of accomplishments in MC are explicitly specified in their semantics. These subclasses include RVCs, verbs of creation and verbs of posture and of placement. But if it is syntactically introduced, that would explain why it cannot co-occur with the syntactic introduction of telicity from √DAO; the two telicity-introducing phrases would be competing for the same syntactic position.

b. *Zhangsan diuqi-*dao*-le yi-ben shu.
Zhangsan abandon-reach-PFV one-CL book'
Intended: 'Zhangsan abandoned a book.'

Since these Incremental Theme subjects serve to measure out the event and hence specify the endpoint, they are similar to Incremental Theme objects. If this is on the right track, then the fact that Incremental Theme subjects cannot co-occur with -*dao* can be subsumed under the same reason as Incremental Theme objects are ruled out with the co-occurrence with -*dao*.

Now the list of verbs incompatible with -*dao* can be further simplified as in (86):

(86) a. States (e.g., change-of-state verbs, Experiencer subject psych-verbs);
b. Accomplishments (e.g., causatives, RVCs, activity verbs taking Incremental Theme objects and verbs taking Incremental Theme subjects);
c. Achievements (e.g., transaction verbs of the *lend*-type).

The result of (86) naturally leads to the fact that only activities, including Experiencer object psych-verbs and transaction verbs of the *borrow*-type, and motion verbs with Goal as the potential object are compatible with –*dao*. This suggests that in MC, only these activity verbs and a certain type of motion verb can combine with the endpoint-denoting -*dao*. The other types of verbs either are semantically incompatible with the endpoint-denoting morpheme, such as states, or already contain certain arguments that carry out the same function as -*dao* does.

5. Conclusion

In this paper, I use the verbal suffix -*dao* as a new diagnostic tool to re-examine the lexical semantics of verb types. In addition, within the verb types that are compatible with -*dao*, there are two sets of properties that distinguish themselves from each other. To account for these properties of V-*dao* complex predicates, I adopt the Probe-Goal system in Minimalist Program and the notion of an a-categorial root from Distributed Morphology. In particular, I propose that -*dao* is headed by a light verb that has the aspectual feature of telicity, and that the telicity feature must be checked in object position. I further propose that there are two syntactic structures associated with V-*dao* complex predicates. One -*dao* takes a direct object and occurs with motion verbs, and the other -*dao* only introduces an endpoint and checks the feature against a direct object, but does not introduce the direct object itself. The two -*dao*s have in common that they must check an endpoint feature against a direct object, but differ in the source of the direct object in question.

The implications from this study indicate that even though there are different ways to form an endpoint reading in MC predicates, including using Incremental Themes, RVCs, and *-dao*, these elements may compete with each other and *-dao* appears to be the last resort. But the exact reason for why certain elements appear to have priority to form an endpoint in an event and why and which ones do not still needs further investigation.

Acknowledgements

I wish to express my gratitude to Heidi Harley, Simin Karimi, and Janet Nicole, who provided very detailed and insightful feedback on my previous drafts. I would also like to thank Pei-Yi Katherine Hsiao, Yi-Hsun Chen, Ching-Yu Yang, Rudy Troike and the audiences at University of Arizona for their constructive comments and suggestions.

References

Alexiadou, A,, Anagnostopoulou, E., Schäfer, F. 2006. The properties of anticausatives crosslinguistically, In *Phases of Interpretation,* ed. by M. Frascarelli, 187-211. Berlin: Mouton.

Belletti, A., Rizzi, L. 1988. Psych-verbs and Θ-theory. *Natural Language and Linguistic Theory* 6: 291-352.

Chao, Y.R. 1968. *A Grammar of Spoken Chinese*. Berkeley: University of California Press.

Chomsky, N. 1995. *The Minimalist Program*. Cambridge, Mass: MIT Press.

Chomsky, N. 2000. Minimalist inquiries: the framework. In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. by R. Martin, D. Michaels, and J. Uriagereka , 89-155. Cambridge, MIT Press.

Comrie, B. 1976. *Aspect*. Cambridge, England: Cambridge University Press.

Dowty, D.R. 1979. *Word Meaning and Montague Grammar*. Dordrecht: Kluwer.

Dowty, D.R. 1991. Thematic proto-roles and argument selection. *Language* 67: 547-619.

Embick, D., Noyer, R. 2007. Distributed Morphology and the Syntax/Morphology Interface. In *The Oxford Handbook of Linguistic Interfaces*, ed. by G. Ramchand and C. Reiss, 289-324. Oxford: Oxford University Press.

Folli, R., H. Harley. 2005. Flavors of v: consuming results in Italian and English. In *Aspectual Inquiries*, ed. by P. Kempchinsky and R. Slabakova, 95-120. Dordrecht: Kluwer.

Folli, R., Harley, H., Karimi, S. 2005. Determinants of event type in Persian complex predicates. *Lingua* 115: 1365-1410.

Hale, K., Keyser, S.J. 1993. On argument structure and the lexical expression of syntactic relations. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, ed. by K. Hale and S. J. Keyser, 53-109. Cambridge, Mass: MIT Press.

Halle, M., Marantz, A. 1993. Distributed Morphology and the pieces of inflection. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, ed. by K. Hale and S. J. Keyser, 111–176. Cambridge, Mass.: MIT Press.

Harley, H. and R. Noyer. 1999. State-of-the-Article: Distributed Morphology. *GLOT International* 4: 3–9.

Huang, C.T.J. 1997. On lexical structure and syntactic projection. *Chinese Languages and Linguistics* [*Zhongguo jingnei yuyan ji yuyanxue*] Vol. 3, 45-89.

Huang, C.T.J. 2006. Resultatives and unaccusatives: a parametric view. *Bulletin of the Chinese Linguistic Society of Japan* 253:1-43.

Kratzer, A. 1996. Severing the external argument from its verb. In *Phrase Structure and the Lexicon*, ed. by J. Rooryck and L. Zaring, 109-137. Dordrecht: Kluwer.

Krifka, M. 1989. Nominal reference, temporal constitution and quantification in event semantics. In *Semantics and Contextual Expression*, ed. by R. Bartsch, J. van Benthem and P. van Emde Boas, 75-115. Dordrecht: Foris.

Krifka, M. 1998. The origins of telicity. In *Events and Grammar*, ed. by Susan Rothstein, 197-235. Dordrecht/Boston/London: Kluwer.

Levin, B., Rappaport Hovav, M. 1995. *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, Mass: MIT Press.

Li, C. N., Thompson, S. 1981. *Mandarin Chinese: a Functional Reference Grammar*. Berkeley, CA: University of California Press.

Lin, J. 2004. *Event Structure and the Encoding of Arguments: the Syntax of the Mandarin and English Verb Phrase*. Doctoral Dissertation, MIT.

Lin, J.W. 2002. Selectional restrictions of tenses and temporal reference of Chinese bare sentences. *Lingua* 113:271-302.

Lin, T.H.J. 2001. *Light Verb Syntax and the Theory of Phrase Structure.* Doctoral Dissertation, UC Irvine.

Liu, C.S.L. 2010. The positive morpheme in Chinese and the adjectival structure. *Lingua* 120: 1010-1056.

Perlmutter, D. 1978. Impersonal passives and the unaccusative hypothesis. *Proceedings of the 4th Annual Meeting of the Berkeley Linguistic Society* 4: 157-89.

Pustejovsky, J. 1991. The syntax of event structure. *Cognition* 41: 47-81.

Rosen, S.T. 1999. The syntactic representation of linguistic events. *GLOT International* 4: 3-10.

Rothstein, S. 2004. *Structuring Events*. Oxford: Blackwell.

Smith, C. S. 1991. *The Parameter of Aspect*. Dordrecht: Kluwer.

Soh, H.L., Kuo, J.Y.C. 2005. Perfective aspect and accomplishment situations in Mandarin Chinese. In *Perspectives on Aspect*, ed. by A. van Hout, H. de Swart and H. Verkuyl, 199-216. Dordrecht: Springer.

Sybesma, R. 1992. *Causatives and Accomplishments: The Case of Chinese Ba*. Doctoral Dissertation, HIL/Leiden University.

Sybesma, R. 1997. Why Chinese verb-*le* is a resultative predicate. *Journal of East Asian Linguistics* 6: 215-261.

Tai, J.H.Y. 1984. Verbs and times in Chinese: Vendler's four categories. In *Papers from the Parasession on Lexical Semantics*, ed. by D. Testen, V. Mishra and J. Drogo, 289-296. Chicago Linguistic Society.

Tenny, C. 1994. *Aspectual Roles and the Syntax-Semantics Interface*. Dordrecht: Kluwer.

Tham, S.W. 2009. *Building Resultatives in Mandarin (from the result)*. Tenth Stanford Semantic Fest, Stanford University. March.

Tsai, W.T. D. 2008. Tense anchoring in Chinese. *Lingua* 118: 675-686.

van Hout, A. 2004. Unaccusativity as telicity checking. In *The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface*, ed. by A. Alexiaodou, E. Anagnostopoulou and M. Everaert, 60-83. Oxford: Oxford University Press.
Vendler, Z. 1967. *Linguistics in Philosophy*. Ithaca, New York: Cornell University Press.
Wu, J.S. 2005. The semantics of the perfective *le* and its context-dependency: an SDRT approach. *Journal of East Asian Linguistics* 14: 299-336.
Yang, C.T. 2009*. Mandarin Chinese Psych Verbs: Unaccusativity and Unergativity.* MA thesis, National Chung Cheng University.
Zhu, D.X. 1982. *Yufa Jiangyi [Lectures on Chinese Syntax].* Beijing: Shangwu Yingshuguan.