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ENCYCLOPEDIA OF CHINESE LANGUAGE AND LINGUISTICS

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Hooi Ling Soh

Aspect, Premodern

It is generally agreed that in the earliest stages of Chinese a morphological system was in place which extended to aspectual marking on the verb (Sagart 1999; Gassmann and Behr 2005; Jīn 2005, 2006; Schuessler 2007). More particularly, it is assumed (e.g., Jīn 2005, 2006; Gassmann and Behr 2005) that the aspectual morphology of Ancient Chinese involved a distinction between the imperfective (wèi wánchéng tǐ 未完成體) and the perfective aspect (wánchéng tǐ 完成體),

e.g., by a voiceless (imperfective)—voiced (perfective) alternation of the root initial, or-more frequently—by suffixation: i.e., the perfective aspect could be marked by a suffix *-s (similar to the Classical Tibetan morphological system; Jīn 2005, 2006), and the imperfective aspect by a suffix *-h (Jīn 2006:412f). The aspectual distinction frequently corresponds to the differentiation between an agentive transitive variant of a verb, i.e., a transitive accomplishment or achievement (voiceless initial), and an intransitive resultant state variant with a theme subject (voiced initial), which is perfective in meaning (Jīn 2006:50f,89); the latter is also often marked by the suffix *-s. These distinctions are evidently related to the lexical aspect of the verb. The close relation the aspectual morphology displays with regard to the telicity features of the verb and its internal argument (Jin 2006) seems to suggest a localization of the aspectual affixes in Inner Aspect, the domain of lexical aspect, in line with Travis (2010), rather than in the domain of Outer Aspect which hosts the grammatical (viewpoint) aspect (Travis 2010:142) (cf. the distinction between imperfective and perfective made in Meisterernst 2014).

Besides these obvious traces of verbal morphology, temporal, and aspectual relations were overwhelmingly expressed by way of implication (Schuessler 2007:41). Accordingly, a study of aspect in premodern Chinese will have to concentrate on the analysis of the semanto-syntactic devices, i.e., on the lexical means, to express aspectual distinctions. Two different systems can be observed: 1) in Pre-Medieval Chinese (5th cent. BCE-1st cent. CE) aspectual distinctions are mainly expressed by aspectual adverbs; 2) in Early Medieval and Medieval Chinese (2nd to 13th cent. CE) additionally the source structures of the aspectual system of Modern Mandarin start to develop. In the study of both systems, the analysis of *lexical aspect* is of particular relevance.

1. VIEWPOINT ASPECT AND LEXICAL ASPECT (OR AKTIONSART)

Aspect can be divided into *grammatical* or *view-point aspect* and *lexical aspect* or *situation type*. The category *grammatical aspect* is usually real-

ized in the morphology of the verb and refers to "grammaticized viewpoints such as the perfective and imperfective" (Smith 1997:1), whereas the lexical aspect concerns the situation types (Aktionsarten) of the verb, i.e., it is inherent to the semantics of the verb and refers to the "situation structure" (idem). Both convey information about the temporal structure of a situation, its beginning, duration, and end, and the perspective from which it is viewed, and they are closely linked in a compatibility relation. Lexical aspect can be realized in the primary structure of the lexeme, or by secondary morphological structures, e.g., by derivational morphemes such as German er-, auf-, aus-, which derive a telic from an atelic verb, a morphological distinction which evidently also existed in Chinese (Jīn 2006). But also without morphological marking, lexical aspect is derivable from the semantics of the verb and its complements. Of particular relevance for the lexical aspect is the semantic feature of telicity (boundedness) which refers to the temporal boundaries, i.e., the natural initial and final point of a situation. In Vendler's (1967) seminal study on verbs and times, four different verbal categories are distinguished: states, activities, accomplishments, and achievements (→ Vendlerian Verb Classes). States and activities are atelic or unbounded, excluding the initial and the final points from the temporal structure of the predicate. Accomplishments and achievements are telic: achievements merely include the final change of state point, while accomplishments also include the process part of the situation. Atelic predicates are compatible with duration phrases, for *x time*, whereas telic predicates are compatible with time span adverbials in x time. Subsequent discussions sometimes reduce Vendler's system to three different categories: states and processes as atelic, and events as telic situations. (e.g., Lyons 1977:707; Filip 1999). Recently the compositional nature of the lexical aspect has been emphasized, i.e., the relevance of arguments and adjuncts for the interpretation of the predicate (Dowty 1991; Verkuyl 1993, 2005; Krifka 1998; Tenny and Pustejovsky 2000). The temporal structure of the different lexical aspects can be depicted as follows (following Smith 1991, 1997).

(1) Parts of the temporal structure:

I = initial point, F = final point, >>> = process, ___ = stage. T_{i-1} is the time before an event, activity, or state starts, I = $t_{initial}$ refers to the initial point of a situation, $t_{process}$ refers to the process part of an activity or an accomplishment, F = t_{final} refers to the natural final point of an accomplishment or the final point of an activity, and $t_{resultant \, state}$ refers to the state resulting from a previous change of state. In a genuine state F would be identical with I, the initial point of the state.

(2) Temporal structure and lexical aspect, the bracketed parts of the temporal structure are not relevant for the respective lexical aspect:

(a) Activity (I) >>>>>> (F)
(b) Accomplishment (I) >>>>>> F
(c) Achievement (I >>>>>>>>

F _____
(resultant state)
(d) State (I) _____ (F)

The relevance of the category *lexical aspect* as a crucial constraint in the employment of aspectual suffixes has been acknowledged for some time for Modern Chinese (Tai 1984; Smith 1991, 1997; Ross 1995, 2002; Tang 2001; Mǎ 2005; J. Lin 2003, 2005, 2008). Equally, it has been taken into account in studies on the employment of duration phrases and aspecto-temporal adverbs in Pre-Medieval Chinese (Meisterernst 2003, 2005, 2008, 2011, 2014) and on the development of the V_1 (NO_{Obj}) V_2 structure in Medieval Chinese, the source structure of the aspectual suffixes of Modern Mandarin (Jiǎng 1994, 2001, 2007; Meisterernst 2011).

2. Preverbal Aspectual Markers: Adverbs

In Pre-Medieval Chinese, aspectual meanings are predominantly expressed by a closed class of aspectual adverbs, which are closely connected to the semantics, i.e., the *lexical aspect*, of the

verb they select. In this they resemble the aspectual suffixes of Modern Mandarin (Meisterernst 2005, 2011), although they are evidently located in a different position. Syntactically, aspectual adverbs are strictly confined to preverbal position, in contrast to point of time adverbials which are licensed in both sentence-initial and preverbal positions; there is no post-verbal position available for adverbs. They occupy a position between point of time and modal adverbials and manner adverbs. Prepositional phrases, the YI-phrase, negative markers, and wh-pronouns can intervene between aspectotemporal adverbs and the verb. The adverbs express different aspectual values:

The resultative and completive:

1. 勃既定燕而歸, 高祖已崩矣。

Bó jì dìng Yān ér guī,
Bó already establish Yān CONJ return
Gāo Zǔ yǐ bēng yǐ.
Gāo Zǔ already pass.away ASP
'When Bó had pacified Yān and returned,
Gāo Zǔ had already passed away.'
Shǐjî: 57; 2071

The progressive:

2. 「兩龍方鬭,且待之。」

"Liǎng lóng fāng dòu, qiě dài zhī." both dragon fang fight adv wait obj 'The two dragons are just fighting with each other, I should better wait for it (the result).' Shǐjî: 90; 2591

The habitual aspect:

3. 少時常與鮑叔牙游, 鮑叔知其賢。

Shào shí cháng yů Bào Shú Yá young time CHANG with Bào Shú Yá yóu, Bào Shú zhī qí xián. travel.about Bào Shú know poss worthy When he was young, he used to travel about with Bào Shú Yá, and Bào Shú knew that he was worthy.' Shǐjì: 62; 2131

The inchoative aspect:

4. 成王在豐,天下已安,周之官政未次序。 Chéng wáng zài Fēng, tiān xià Chéng king Loc Fēng heaven below yĭ ān, Zhōu zhī guān already peace Zhōu sub office zhèng wèi cìxù. regulate government NEG.ASP 'King Chéng was in Fēng, and the empire had already become peaceful, but the offices and the administration of Zhou had not been regulated yet.'

Some of these aspectual adverbs express rather temporal relations connected to the past and the future (Meisterernst 2004, 2014). The syntactic position of the aspectual adverbs provides an argument in favor of their localization in a position within the TP, but outside the ν P (for a syntactic analysis of the vP in Ancient Chinese see Aldridge 2010, 2011, 2012a, 2012b). Due to their close relation with the semantics of the verb, they are assumed to be located in Outer Aspect which selects an articulated vP containing Inner Aspect Phrases in line with Travis (2010), the telicity features of which correspond to those of the Outer Aspect Phrase; that is to say, a [+ perfective] Outer AspectP by default selects a νP with a [+ telic] Inner Aspect Phrase (Meisterernst 2014). If the aspectual features of the Outer and the Inner Aspect Phrase do not coincide, an aspectual shift of the predicate is caused.

The system of aspecto-temporal adverbs remains basically intact in the Medieval period, although changes in the array of adverbs used occur, while the source structure for the suffixes of Modern Mandarin starts to develop.

3. POSTVERBAL ASPECTUAL MARKERS: PHASE COMPLEMENTS, ASPECTUAL SUFFIXES

In Early Medieval Chinese a new structure develops: the structure V_1 {NP_{Obj}} V_2 {NP_{Obj}}. Depending on the verbs appearing in the position of V_2 , the object either precedes or follows V_2 . Different aspectual meanings are expressed by V_2 at different historical stages: (1) the resultative and completive (ex. (5)); (2) perfective viewpoint and experiential aspect; (3) continuative aspect; and (4) progressive aspect (ex. (6)).

- 5. 作此語了,遂即南行。 Zuò cĭ yů liǎo, suí make this speech finish then jí nán xíng. south immediate go 'After having said this, he immediately went south.' (Méi 1999:285) Dūnhuáng biànwén jí 8
- 6. 如戰陣廝殺,擂著鼓,只是向前去。 zhàn zhèn sī shā, lèi like fight field each.other kill beat gů, zhĭ shì xiàng qián qù. ZHE drum only COP towards front go '[It is] like fighting on the battle field and killing each other, beating the drums, one has to proceed.' (Chen 1997:207, translation mine) Zhūzĭ yŭlèi

The development of this structure constitutes a major change in the expression of aspectual relations in Chinese. Some, but not all, of the $\rm V_2$ attested in the history of the Chinese language develop from full verbs into phase markers and complements and eventually into aspectual suffixes. Different stages of this grammaticalization process still prevail in today's dialects (Cáo 1999:25; Lien 2005; Wú 2006).

4. The Perfective Aspect

In Pre-Medieval Chinese the grammatical aspect, i.e., the imperfective and the perfective aspect are not marked obligatorily, but can be indicated explicitly by the aspecto-temporal adverbs ji 既 and $y\tilde{t} = \text{'already'}$. $J\tilde{t}/y\tilde{t}$ express the resultative and the completive, functions related to the perfective aspect, expressed by -le ☐ in Modern Mandarin, and they contrast with the aspectual negative marker *wèi* 未 'not yet' which refers to an incomplete situation (Pulleyblank 1994:323, 1995:112f), comparable to the negative of the perfective méi yǒu 沒有 in Modern Mandarin (Pulleyblank idem; Meisterernst 2008). The aspectual function of $j\hat{i}$ and $y\tilde{i}$ is assumed to have derived from a verbal function 'use up, finish, complete' and 'stop, cease' (Pulleyblank

Table 1. Aspectual adverbs in the Pre-Medieval text Shǐjì 史記

	Inchoative/ Inceptive	Completive/ Resultative/ ≠ Completive	Progressive/ Continuous	Habitual/ Continuous	Habitual/ Frequentative
Past	chū 初, shǐ 始, jì 既, yǐ 已, fāng 方	jì 既, yǐ 已, yǐ cháng 已嘗, yǐ yè 已業, yè yǐ 業已, wèi 未	fāng 方	sù 素, yǎ 雅, cháng 常	cháng 常, (sù 素, yǎ 雅), (cháng 嘗), wèi cháng bù 未嘗不, shuò 數
Past-Present				sù 素, wèi cháng 未嘗	
Present	jì 既, yǐ 已, fāng 方	jì 既, yǐ 已, yǐ yè 已業, yè yǐ 業已, wèi 未	fāng 方	cháng 常, wèi cháng bù 未嘗不	cháng 常, wèi cháng bù 未嘗不, shuò 數
Future	jì 既, yǐ 已, fāng 方	jì 既, yǐ 已, yǐ yè 已業, yè yǐ 業已, wèi 未	fāng 方	cháng 常, wèi cháng bù 未嘗不	cháng 常, wèi cháng bù 未嘗不, shuò 數

1994, 1995; Harbsmeier 1981; Unger 1992; Z. Lin 1999; Meisterernst 2005, 2014). Wèi is assumed to be an etymological derivation of wèi (OC *mət-s, EMC *mujh) from the negative root *m- in wú 無 (OC *ma, EMC muð 'not have' and the rhyme (= rime) attested in adverbial jì (OC *kət-s, EMC *kijh): 'not already' > 'not yet', 'never' (Pulleyblank 1994, 1995:114; but see also Djamouri 1991). Of the two adverbs yi (OC *gə?, EMC *ji') is the younger one. In earlier texts jì appears in matrix and subordinate clauses, while in later Pre-Medieval texts it is mainly confined to subordinate clauses, indicating the completion of a situation before the start of another. In Early-Medieval Chinese it is entirely replaced by $y\tilde{t}$ in matrix clauses.

In Pre-Medieval Chinese, resultative predicates frequently correlate with the sentence final particle (SFP) yǐ 矣 (OC *qəʔ, EMC i'); in contrast, predicates with wèi can correlate with the SFP yě 也; both SFPs are assumed to express the sentential aspect (Pulleyblank 1994, 1995:116f). Yǐ 矣, which is typical for verbal predication, is comparable to the SFP le \Box in Modern Mandarin (Pulleyblank 1994, 1995), expressing a change of state, whereas yě is typical for nominal and descriptive predication. The strict functional distinction between yǐ 矣 and yě ceases to exist in Early Medieval times and yě assumes functions

similar to $y\check{t}\not \in (Sun 1996:93)$. Sentences with $w\grave{e}i$ and $j\grave{i}/y\check{t} \stackrel{\square}{=} are$ assumed to form a dichotomy similar to that of sentences with $m\acute{e}i$ $y\check{o}u$ and with verbs with the suffix -le in Modern Mandarin (Meisterernst 2005).

Table 2. Aspectual marking in Pre-Medieval and Modern Chinese

	Pre-Medieval Chinese	Modern Mandarin
a.	<i>jì</i> 既 / yǐ 已 VP ₁ (yǐ 矣),	V_1 -le $\overline{\ }$, VP_2
	VP_2	
a'	(<i>jì</i> 既 /) yǐ 已 VP	V_1 -le $NP_{quantified}$
	(yǐ 矣)	object
b	wèi 未 VP ₁ (yě 也), VP ₂	méi (yǒu) 沒 (有)
		VP_1 , VP_2
b'	wèi 未 VP ₁ (yě 也)	méi (yǒu) 沒 (有)
		VP_1

The aspectual adverbs $ji / yi \square$, which are perfective in meaning and are assumed to be located in a [+ perfective] Outer Aspect Phrase, and the negative marker wèi, which denies a successful change of state, by default combine with a vP with a [+ telic] VP as their complement, focusing on the change of state point which also constitutes the initial point of a resultant state (Meisterernst 2014). Analogously, they can focus

on the initial point of a genuine (changeable) state thus expressing an inchoative aspect. With activity verbs they are employed merely by way of exception and entail a change of viewpoint from imperfective to perfective (Meisterernst 2005, 2014). The default employment is represented by the following examples: in (1) above, $y\tilde{t} \to \text{selects}$ a typical achievement verb in a matrix clause; in (7) a state verb (adjective) is selected by $j\tilde{t}$ which causes a shift of situation type to an inchoative event reading of the verb.

7. 錢既多,而令天下非三官錢不得行。 Qián jì duō, líng money already numerous CONI order guān qián sān heaven below unless three office money dé bù xing. can go 'But since the money had already become plentiful an order was issued that unless it was money from the three offices it was not

allowed to be put into circulation.'

Shǐjì: 30; 1435

In Early Medieval Chinese, i.e., as early as during the Hàn period, the verb $y\check{t} \boxminus$ 'stop, finish, complete' starts to appear as an intransitive V2 in the structure $[V_1 (NP_{obj}) V_2]$. In this function $y' \in \square$ is assumed to be the predecessor of the V2 liǎo (Jiǎng 2007), which eventually develops into the perfective suffix of Modern Mandarin (Méi 1999; Cáo 1986, 1999). In Early Medieval Chinese, i.e., in the 5th century and earlier (Jiǎng and Cáo 2005:203), several synonyms can fill the slot of V₂: yǐ 已, jìng 竟 'finish, complete', qì 訖 'finish, cease', and bì 畢 'finish'; the verb *liǎo* 'finish, complete' only appears regularly in this function in the Táng period (idem). Additionally, the verb *què* 卻 (and a small number of other verbs indicating completion) is attested in the same function, but in a different position (Cáo 1986): V₁ què NP_{Obi}. Different hypotheses have been proposed regarding (1), the possible emergence of the new structure under the influence of Buddhist texts in Middle Indian languages (Cheung 1977; Zhào 1979; Méi 1981, 1999; Jiǎng 2001, 2007; Meisterernst 2011); and (2), the path of grammaticalization of lião from a V2 to an aspectual marker ([V-suffix NP_{Obi}]) (Sun 1996; Wú 1996,

2005; Cáo 1999; Jiǎng and Cáo 2005). It has been assumed that the V2 in sentence final position was triggered by the need to translate a gerund in sentence-final position in Sanskrit (Cheung 1977:66), but Méi (1981:70) provides convincing evidence against this hypothesis based on the history of the V2 and the general syntactic constraints of Chinese (Jiǎng and Cáo 2005; Jiǎng 2007; Meisterernst 2011). Of the V_2 yř Ξ , jìng 'finish, complete', qì 'finish, cease', and bì 'finish', $y\check{t}$ \square is predominantly attested in Buddhist texts, whereas the other three mostly appear in original Chinese texts (Jiǎng and Cáo 2005:205f; Jiǎng 2007). Two variants of yǐ 🖯 have to be distinguished (idem): the first, yi, already existed during the Han period and was confined to durative verbs as V₁, identically to the other verbs of the group. Under the influence of the translation of Buddhist texts into Chinese the function of $y\check{i} \supseteq \text{broadened to a V}_2 \text{ following non-durative}$ verbs, i.e., telic achievement verbs; of the two only $y\check{t}_2$ can be considered to be the predecessor of liǎo (Jiǎng 2007; but see also Meisterernst 2011). Already during the Táng period the first group of verbs was gradually replaced by liǎo (Cáo 1987:10f), whereas què as a complement prevailed besides *liǎo* until the Sòng period; the latter eventually became grammaticalized as a bound morpheme in the 15th century (Sun 1996:90).

As V_2 $y\check{\imath}$ \square usually appears in subordinate (non-finite) clauses and thus replaces the adverb $j\grave{\imath}$, whereas the aspectual adverb $y\check{\imath}$ \square in matrix clauses is not affected by the new system; it prevails in its adverbial function and eventually develops into the aspectual adverb $y\check{\imath}jing$ \square \bowtie of Modern Mandarin.

As has been shown in Jiǎng (2001, 2007) and Meisterernst (2011), the employment of $y\check{t}$ \square —and the other V_2 , identically to the suffix *-le* in Modern Mandarin—displays a close relation to the lexical aspect of the verb (Jiǎng 2001, 2007, Meisterernst 2011), i.e., it is confined to verbs that allow a change of state reading (see table 2).

8. 諸比丘尼說是偈已,白佛言。

Zhū bǐqiūní shuō shì jì yǐ, bái all bhikṣu say this gāthā YI tell Fó yán. Buddha say 'After all the bhikṣu nīs had recited this gāthā, they said to the Buddha:...'

To9, no.262, p.36b7

5. THE EXPERIENTIAL ASPECT

The experiential aspect marked by $-gu\grave{o}$ $\stackrel{>}{\boxtimes}$ in Modern Mandarin has been considered a variant of the perfective aspect expressed by -le, distinguishable from it by its span, which contrary to -le "extends beyond the final endpoint of a situation" (Smith 1997:263f). In Pre-Medieval Chinese the experiential aspect is not marked, although $gu\grave{o}$ is already attested as a V_2 . Only in Medieval Chinese does this V_2 start to develop into a marker of the completive or resultative (Cáo 1995; Jiǎng and Cáo 2005:210) and eventually in the Sòng period as an experiential marker, while the completive function still prevails.

6. The Inchoative Aspect

The inchoative aspect can be expressed by the two aspectual adverbs $ch\bar{u}$ ${}^*\!\!\!/\!\!\!/}$ 'first' and $sh\check{t}$ ${}^*\!\!\!/\!\!\!/}$ 'first' in Pre-Medieval Chinese. $Ch\bar{u}$ mostly modifies achievement verbs indicating that their final, i.e., the initial point of the resultant state, has just been achieved. Contrastively, $sh\check{t}$ more frequently modifies atelic activity and stage-level predicates. Both can be labeled as 'super-lexical' morphemes, since 'they focus a particular aspect of a situation rather than specifying its content' (Smith 1997:24).

q. ... 初起兵於廣陵。

...chū qǐ bīng yú Guǎnglíng.
CHU raise troop PREP Guǎnglíng
'...he just raised his troops in Guǎnglíng,...'
Shǐjì: 106; 2828

Additionally, state predicates concluded by the final particle $y'_i \not\approx$ attain a change of state reading usually focusing on the initial point of the state, i.e., an inchoative reading.

7. THE PROGRESSIVE ASPECT

According to its distribution together with the lexical aspect of the verb a distinction can be made between the progressive, which depicts the process part of an activity at reference time, and the continuous aspect, which depicts the stage part of a state predicate (Bybee et al. 1994:126); both belong to the imperfective aspect or viewpoint and exclude the initial and the final points of the situation. In Modern Mandarin, the distribution of the markers of the continuous aspect -zhe 着 / 著 and the progressive aspect zài 在 is determined by the lexical aspect of the verb they select. In Pre-Medieval Chinese the progressive aspect can be indicated by the aspecto-temporal adverb fāng 方 'just, about to' which does not show any constraints with regard to the lexical aspect it selects. However, the *lexical aspect* of the verb determines the part of the temporal structure which is emphasized by *fāng*: it is the process or stage part with atelic and with accomplishment predicates, and the change of state point with achievement predicates, for which no process or stage is temporally available. In example (10) fang emphasizes the ongoing process part of an activity.

10. 漢王方食,曰: 「子房前!」 Hàn wáng fāng shí, yuē: "zǐ Fáng Hàn wáng just eat say zǐ Fáng qián!" proceed 'The king of Hàn was just (in the process of) eating and he said: "Come in."'

Shǐjì: 55; 2040

In the Early Medieval literature the progressive or continuous function of the aspecto-temporal adverb fāng is obsolete even with activity and accomplishment verbs which by default license a progressive reading and only its function with achievement verbs is still productive. Only when zhe was fully grammaticalized as an aspectual marker in the Sòng period, the progressive aspect was marked in a systematic manner. The aspectual suffix -zhe 著 most likely starts to develop from the verb zhuó 著 'attach to' during the Medieval period; it passes different stages from a marker of the completive, and a marker of the continuative before it eventually (during the Sòng period) grammaticalizes into a marker of the progressive (Jiǎng 1994; Chen 1997; Cáo 1986; Zhāng 2002; Jiǎng and Cáo 2005); other non-aspectual functions, e.g., as a preposition

are additionally attested with this lexical item. In example (11), $zhu\acute{o}$ appears as a durative marker, as a marker of the progressive it appears in example (6).

11. 元祐諸賢, 多是閉著門說道理底。

Yuányòu zhū xián, shì bì Yuányòu pi virtuous many SHI close zhe mén shuō dàolĭ de. zhe door talk rationality 'The virtuous of the Yuányòu period, often they talk about rationality behind closed doors.' (Chen 1997:206f, glossing and translation mine) Zhūzĭ yŭlèi

According to Méi (1988) the differences in reading of the aspectual suffix in Modern Mandarin and in some other varieties of Chinese are caused by different Middle Chinese readings of the character 著 attested in the *Guǎngyùn* 廣韻 and later → rhyme dictionaries; the modern reading *zhe* is not attested in these dictionaries, but was possibly already in use when *zhuó* was fully grammaricalized (see Chen 1997). According to Jiǎng (1994) and Chen (1997) the different functions *zhuó* displays during its history are related to the semantics of the verb it attaches to. However, further in-depth studies are required to figure out the exact constraints the development of the aspectual markers is subject to.

8. Duration

In Pre-Medieval Chinese (as in later periods) duration is expressed by pre- and postverbal duration phrases—for x time—which, although temporally bounded, are not considered telic. They are usually confined to atelic, namely activity or state predicates (Smith 1997:113). State predicates can be subdivided into genuine and derived states (with telic verbs). States derived from telic verbs refer to resultant states and, in contrast to some other languages such as English (see J. Lin 2008), they license duration phrases, necessitating a distinction between: (1) situational duration phrases (with state and activity verbs); and (2) resultant state duration phrases (with achievement verbs) (Meisterernst 2003,

2014 and references therein). Situational duration phrases are licensed in pre- and post-verbal position; resultant state duration phrases are confined to the post-verbal position. Example (12) displays the default case of situational duration with an activity verb.

12. 與戰一日餘

yǔ zhàn yī rì yú
with fight one day more
'and fought with them for more than a
day...'
Shǐji: 111; 2927

9. Conclusion

Three different devices to express aspectual variations have to be distinguished in Pre-Medieval Chinese:

- (1) The vestiges of a morphological marking of aspectual distinctions by affixation; they are not productive anymore in Pre-Medieval Chinese. Due to their semantics and the syntactic constraints of the νP in Ancient Chinese, they probably concern the domain of Inner, i.e., the domain of the *lexical* Aspect (Travis 2010) rather than the domain of Outer, the *grammatical* Aspect.
- (2) The marking of aspectual distinctions by aspectual adverbs; these are probably located in the domain of Outer Aspect, responsible for the distinction of the *perfective* and the *imperfective*. The aspectual [+/- perfective] features of Outer Aspect by default coincide with the [+/-telic] features in Inner Aspect and with the [+/-change of state] features of two of the sentence final particles of Pre-Medieval Chinese.

13. Temporal structure and the employment of aspectual adverbs and duration phrases:

>>> I >>>>>> F ______ 方/初/始 方 既/已/方 fāng/chū/shǐ fāng jì/yǐ/fāng situational resultant state duration duration

(3) The structure V_1 {NP_{Obj}} V_2 {NP_{Obj}}, with V_2 first developing into a phase complement and eventually into an aspectual suffix. This

structure is also closely related to the lexical aspect of the verb.

14. Tentative representation of phase complements and temporal structure:

>>> I >>>>>F ______ (已/了) 著 已/了/過/卻/著 著 (yǐ/le) zhuó yǐ/le/guò/què/zhuó zhuó

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Aspectual Adverbs

Aspectual adverbs describe a relation between the beginning or end of a current state and a current stage of that state. Included in traditional grammar books are examples such as zhèngzài 正在 'right at', réngrán 仍然 'still', jiànjiàn 漸漸 'gradually', céngjīng 曾經 'once', cónglái 從來 'ever', *jiù* 就 'then', *cái* 才 'until', etc. These aspectual adverbs may function differently in different dialects, but only standard Mandarin will be discussed in this article. The most typical example of aspectual adverbs discussed in the literature is the opposition between *already* and still in English. Löbner (1989, 1999) argues that this pair of words is a "logical dual", i.e., the meaning of the one is logically equivalent to the external negation of the internal negation of the other. For example, John is already asleep is logically equivalent to It is not the case that John is still not asleep. In contrast, other authors (Van der Auwera 1993; Michaelis 1996; Israel 1997) analyze already and still as (pragmatic) scalar operators, stating how early the state begins or how late it ends. On this analysis, already

marks the asserted state as occurring early with respect to some expected alternative possibility, whereas *still* marks an asserted state as continuing later than an expected alternative possibility. Some authors, such as Lee (2008), argue that both analyses are necessary.

In contrast to English already, Mandarin $y\check{y}\bar{i}ng$ \square $\not\cong$ 'already' has received much less attention in formal analysis and no one seems to have analyzed it in opposition to $h\acute{a}i$ $\not\cong$ 'still' or $r\acute{e}ngr\acute{a}n$ 'still'. Most studies contrast $y\check{y}\bar{i}ng$ with $c\acute{e}ngj\bar{i}ng$ 'ever' rather than with $h\acute{a}i$ (Mǎ 2003; Cáo 2003). According to Lin (2000), what a formula of the form $y\check{y}\bar{i}ng$ (P) asserts is that proposition P is true before a certain time t, which is formally represented as follows:

1. $\lambda P_{\langle i,t \rangle} \lambda t' \lambda t [t < t' \& P(t)]$

This analysis of yijīng is confirmed by later works such as Mǎ (2003), who argues that the grammatical meaning of yijīng is not to indicate completion or change of state as some traditional works say but to emphasize that the proposition modified by yijīng has become a fact before the utterance time, or before another time or a certain action. An important consequence of this analysis is that the proposition modified by yijīng doesn't have to describe a past situation, but can denote a present or future situation. In this respect, as Mǎ (2003) points out, yijīng is different from céngjīng. The latter can only modify a past situation as illustrated by the following examples.

2. 去年我曾經/已經看過這本書。

Qùnián wǒ céngjīng/yǐjīng kàn-guo last.year isG ever/already read-exp zhè běn shū.
this CLF book céngjīng: 'Last year I had the experience of reading this book.'
yǐjīng: 'I had already read this book last year.'

3. 他現在*曾經/已經在睡覺。

Tā xiànzài *céngjīng/yǐjīng zài shuìjiào. 3SG now ever/already PROG sleep céngjīng, INTENDED: 'He was sleeping now.' yǐjīng: 'He is already sleeping now.'