

# Chapter 8

## The Syntax and the Semantics of the Deontic Modals *yīng* 應 and *dāng* 當 in Early Buddhist Texts



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### 8.1 Introduction

Modal verbs in Chinese are a clear instantiation of grammaticalization, to a certain extent comparable to the English modals. All Chinese modals derive from lexical verbs and grammaticalize into markers of deontic and/or epistemic modality, and/or into future markers. The modals 當 *dāng* and 應 *yīng* ‘should’ at issue in this discussion first emerge as modal verbs at the end of the Late Archaic (5th–3rd c. BCE) and the beginning of the Middle Chinese periods (Meisterernst 2011). In the Buddhist literature, both appear regularly as modal verbs in different functions, although they display some syntactic and semantic differences. Some of the differences between the two modals are listed below.

- (a) The two modals differ in their combination with negation in the Buddhist literature:  
NEG+DANG is very infrequent in the Buddhist literature (Zhu 朱冠明 2008), but it regularly occurs in the non-Buddhist literature, expressing negation of necessity on the basis of reason according to Lü 吕叔湘 (2002), (see also Meisterernst 2017a). NEG+YING regularly occurs as the negation of necessity in Early Middle Chinese.
- (b) DANG regularly functions as a future marker in particular syntactic contexts, i.e. predominantly in combination with first person subjects; whereas YING does not appear as a future marker (Zhu 朱冠明 2008: 82).

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- (c) According to the data presented in Sect. 8.4, DANG is also more frequent as a marker of epistemic modality.

Besides their function as modal auxiliaries, DANG and YING both continue to appear as lexical verbs with a nominal complement. Thus, their grammaticalization does not necessarily include a gradual replacement of the lexical verb by a functional category; poly-functionality is a distinctive feature of Chinese modals.

This paper approaches the grammaticalization of the two modal verbs from two different perspectives. In the first part of the paper, the diachronic development from lexical verbs to modal auxiliaries is sketched, and their different functions are analyzed within a syntactic framework. The second part of the paper is devoted to the special employment of YING and DANG in the Buddhist Vinaya literature.

## 8.2 Diachronic Development of *Dāng* and *Yīng* from Lexical Verb to Deontic Auxiliary

*Dāng* 當 is attested as a modal verb from the end of the Late Archaic period (5th–2nd c. BCE) on; it was well established as a modal auxiliary in the Han period (206 BCE–220 CE).<sup>1</sup> In Early Middle Chinese (2nd c. BCE–6th c. CE) it frequently appears in agentless constructions, expressing root readings, i.e. circumstantially induced obligations, but also weak obligation based on laws, rules, and norms; the expression of obligation can be comparatively indirect ‘something should be done’. In the Buddhist literature the modal 當 *dāng* is employed—besides other functions, e.g. to express future tense—<sup>2</sup> as a modal to express advice and admonishments.

The modal verb 應 *yīng/yīng* occurs almost exclusively as a full verb, mostly in the meanings ‘answer, react, etc.’,<sup>3</sup> ‘deserve to’, or correspond to’ in LAC; instances as an auxiliary verb are very sparse. In the early Buddhist literature, its employment as a modal verb increases and simultaneously the number of its occurrences as a full verb decreases. According to its syntactic environment, different kinds of deontic modal values, from strict deontic modality, i.e. contexts of direct command and advice, to modal values connected with wishes (bouletic), or

<sup>1</sup>For more extensive discussions on the development of *dāng* see Meisterernst (2011) and Wu 巫雪如 (2014). Wu 巫雪如 presents the hypothesis that all readings of *dāng*, i.e. the root modal, the deontic, the epistemic and the future meanings are already attested at the end of the Warring States period. According to her, the different readings are induced by the different meanings DANG has as a lexical verb. The readings are partly induced by context (see also Meisterernst 2011). It cannot be excluded that the different meanings and functions of *dāng* were actually marked morphologically. Unger (ms.) proposes a *qùshēng* reading with the meaning ‘appropriate, correct, etc.’ in addition to the *píngshēng* reading.

<sup>2</sup>See Wu 巫雪如 (2014) with the hypothesis that *dāng* had future meanings already at the end of the Warring States period. There readings seem to be rather contextually induced.

<sup>3</sup>See also Li (2004: 234f).

goals (teleological values) are attested.<sup>4</sup> As has been shown in Meisterernst (2012), and as can also be seen from the discussion in Sect. 8.4, *yīng* and *dāng* partly appear in complementary distribution. However, the figures seem to differ according to the texts studied. In the Lotussutra (*Miàofǎ liánhuā jīng* (early 5th c. CE)), for instance, modal *dāng* is more frequently employed in direct commands with a second person subject (but see also the second part of this paper); *yīng* is also employed in indirect deontic contexts with 1st or 3rd person subjects, thus taking over functions originally more characteristic for *dāng* (Meisterernst 2011). In the *Dharmagupta-Vinaya*, discussed below in Sect. 8.4, the percentage of occurrences of *dāng* with first person subjects outnumbers the one of *yīng* by far. According to Gurevič (1974: 112, 114, 120, see also Meisterernst 2011) the future reading is frequently connected to a first person subject, but this constraint does not seem to hold for the Vinaya text studied below.

The examples in (1) and (2) represent the development of *dāng* and *yīng* from lexical verbs to modal auxiliary verbs. In (1a) *dāng* appears as a lexical verb, in b. an unaccusative verb appears as its complement, in c. it is an unergative, in d. it is a transitive verb, and in e. *dāng* appears as a future marker.

- (1)a. 行爵出祿。必當其位 (*lǐjì, yuèlíng* 月令, beginning of EMC)  
 xíng\_jué\_chū\_lù, \_bì\_dāng\_qí\_wèi  
 carry.out\_title\_issue\_salary, \_must\_correspond\_its\_position  
*The conferring of titles and the issuing of salaries must be in accordance with the position.*
- b. 我真王嗣，當立，吾欲求之 (*shǐjì*: 31,1463, 100 BCE)  
 wǒ\_zhēn\_wáng\_sì, \_dāng\_lì, \_wú\_yù\_qiú\_zhī  
 I\_true\_king\_successor, \_DANG\_enthrone, \_I\_want\_require\_3P:OBJ  
*I am the true successor to the king; I should be enthroned, and I want to insist on it.*
- c. 朱公長男以為赦，弟固當出也 (*shǐjì* 41, 1754)  
 Zhū\_gōng\_zhǎng\_nán\_yǐwéi\_shè\_dì\_gù  
 Zhū\_father\_older\_son\_think\_release\_younger.brother\_certainly  
 dāng\_chū\_yě  
 dang\_go.out\_SFP  
*The oldest son of father Zhū thought that since there was an amnesty, his younger brother should certainly get out.*
- d. 天子儀當獨奉酌祠始皇廟 (*shǐjì*: 6266, EMC)  
 tiān\_zǐ\_yí\_dāng\_dú\_fèngzhuó\_cí\_  
 heaven\_son\_ceremony\_DANG\_alone offer.wine\_sacrifice  
 Shǐ\_Huáng\_mào

<sup>4</sup>Anderl (2004: 417 assumes that *yīng* also serves to express epistemic modality in the *Zútáng jī* and that this function was possible “introduced by Indian Buddhist logic which was introduced to China through the translation of Sanskrit scriptures.” On the other hand the development of an epistemic reading from originally deontic readings is well attested e.g. in the Germanic languages (Meisterernst ms.).

## Shǐ Huáng temple

*According to the rites of the Son of Heaven, You alone should offer wine as a sacrifice at the temple of Shǐ Huáng.*

- e. 我所說經典無量千萬億，已說、今說、當說，而於其中

wǒ suǒ shuō jīng diǎn wú liàng

I\_REL tell classic scripture not-have measure

qiān wàn yì, yǐ shuō,

thousand ten-thousand hundred thousand, alreadytell,

jīn shuō, dāng shuō, ér yú qí zhōng,

now tell, DANG tell, CON at its middle,

*Of all the immeasurable thousands, ten-thousands, hundred thousands of sūtras I have recited, which have already been recited, are recited now, and will be recited, among all these, ... (taishō, 9, no. 262, p. 31b, 5th c. CE).*

In example (2a) *yīng* appears as an intransitive lexical verb in a LAC text, in b. it appears followed by a complement which could be analysed either as nominal or as verbal. Constructions like this pave the way for the grammaticalization of a verb to an auxiliary verb. In c. *yīng* has an unaccusative verb as its complement and in d. a transitive verb.

- (2)a. 叔向弗應。 (*zuǒzhuàn, xiāng* 21, 5th–4th c. BCE)

Shú xiàng fú yīng

Shu Xiang NEG<sub>tr</sub> respond

*Shu Xiang did not respond to it.*

- b. 「匹夫笑侮諸侯者，罪應誅，請右司馬速刑焉。」 (*kǒngzǐ jiāyǔ* 1,1, EMC, 3rd. c. CE)

Pǐfū yíng wǔ zhūhóu zhě, zuì yīng zhū,

Common.man mock feudal lord NOM, crime YING punish,

qǐng yòu sīmǎ sù xíng yán

ask right marshal quick punish him

*If a common man mocks the feudal lords he deserves punishment/should be punished; I ask the marshal to the right to punish him quickly.*

- c. 『此白象寶，唯轉輪王，乃得之耳，今有小過，不應喪失。』

Cǐ bái xiàng bǎo, wéi zhuǎnlúnwáng nǎi dé zhī ěr,

This white elephant precious,

only turn-wheel-king then get OBJ SFP,

jīn yǒu xiǎo guò, bù yīng sāngshī

now have small fault, NEG YING forfeit

*This white elephant is precious, only a wheel-turning king can obtain it; even though it has a small fault, it should not be forfeited.* (*taishō* 4, 202, p. 372c, EMC, 5th c. CE).

- d. 王告之言：『象若不調，不應令吾乘之；(taishō 4, 202, p. 372c)  
 Wáng\_gào\_zhī\_yán\_xiàng\_ruò\_bù\_tiao,\_bù\_yīng\_líng\_wú\_\_  
 chéng\_zhī  
 King\_tell\_OBJ\_say\_elephant\_if\_NEG\_tame,\_NEG\_YING\_\_  
 make\_me\_ride\_OBJ  
 The king told him: “If the elephant is not tamed, you should not make me ride it.”

The following path of grammaticalization of *dāng* 當 has been proposed in Meisterernst (2011). In the early Buddhist literature, all functions attested for *DANG* exist simultaneously. Accordingly, *DANG* shows some typical features of grammaticalization, i.e. the development from a full verb to the more functional category of a modal auxiliary and later additionally the development of the post-modal function as a future marker. But it is not the case that the more functional categories gradually replace the lexical meanings, since both exist simultaneously during the last two millennia.<sup>5</sup> Additionally, it is not the most abstract function as a future marker which prevails in history, but rather the full lexical, and the root modal functions; the latter especially in compounds with other modal auxiliary verbs. Furthermore, in its history as studied so far, *DANG* does not show a very strong development from deontic to epistemic meanings. Epistemic readings are less frequent and sometimes they seem to be context-dependent; however, they are clearly attested in the text studied below. In Modern Mandarin, modal auxiliary verbs containing *DANG* are usually analysed as expressing deontic modality. According to Wu 巫雪如’s (2014) analysis, all possible functional meanings of *dāng* are already present in the latter half of the Warring States period. However, the examples she presents are very few, and in many of them *dāng* most likely still functions as a pre-modal verb (with some modal meanings) in the lexical layer, which has not yet grammaticalized and moved upward the functional spine; thus it has not developed yet into a true deontic or future marker. The grammaticalization path of *yīng* is less well studied. Its grammaticalization evidently starts later,<sup>6</sup> but it seems to follow a diachronic development to a certain extent similar to the one of *dāng*; it also functions as a marker of deontic modality and becomes—in combination with *dāng*—one of the default markers of deontic modality in Modern Mandarin. However, it does not develop into a future marker.

<sup>5</sup>For the heuristic principles of grammaticalizations see also Hopper (1991: 22).

<sup>6</sup>In the Early Middle Chinese non-Buddhist corpus, *yīng* appears much less frequently as a modal auxiliary verb than *dāng*. Although, for instance, NEG+YING is much more frequent than NEG+DANG, in most of the instances of NEG+YING, YING still functions as a lexical verb. Whereas *DANG* as a modal auxiliary is already regularly attested in the Western Han period, YING only starts to appear more frequently in the function during the Eastern Han period.

### 8.3 The Syntax of DANG and YING

In this section, the attempt will be made to relate the modal readings of DANG and YING to the syntactic position they occupy, although syntactic evidence for the different positions of modals in LAC and Early Middle Chinese is not very conspicuous. It has been proposed that epistemic, deontic and dynamic modals occupy different positions in the hierarchy of functional heads (e.g. Cinque 1999); they all are in a position higher than lexical verbs. The traditional distinction between (epistemic) raising and (deontic) control verbs is difficult to maintain in Chinese (see e.g. Lin and Tang 1995); most modal verbs actually seem to be raising verbs. Recently, the finiteness features of the complement of modal verbs have been shown to differentiate between epistemic and deontic readings of modals. Epistemic modals, which appear very high on the syntactic spine, are supposed to have finite CPs as their complement in Chinese, whereas root (deontic and circumstantial) modals select non-finite TPs (Lin 2011, Meisterernst 2015). Three different issues will be discussed in this section:

- (1) The size of the complement clause;
- (2) The finiteness features of the complement clause;
- (3) The position of the modal.

The size of the complement clause is closely connected to its finiteness features and to the status of the modal as an auxiliary or a lexical (modal) verb. Following proposals by Cormack and Smith (2002), and by Butler (2003) the semantic scope of negation will be employed to determine the relation between the modal reading and the syntactic position of a modal. As supportive evidence for different syntactic realizations, the position of *wh*-adverbials with respect to deontic and circumstantial modals will be analysed.

#### 8.3.1 *The Size of the Complement Clause of the Modals DANG and YING*

The complement of a modal auxiliary verb in LAC can be relatively complex; it can include applicative phrases, such as the YI-phrase and the YU-phrase, and some other material, typically appearing in *vP*, but it does not seem to go beyond the size of *vP*. Applicative phrases such as the 以 *yǐ*-phrase appear within or at the edge of *vP* (see Aldridge 2012), and the verb in LAC does not move out of *vP*. In LAC an YI-phrase regularly follows a modal verb as in the example with the possibility

(ability) modal 能 *néng*.<sup>7</sup> According to the standard assumption, the verb moves from VP to a higher functional projection (Huang 2014; Lin 2001; Tang 2001). In the case of a light verb or a high applicative in this position the verb cannot be moved out of VP, because this would violate Travis' (1984) head movement constraint (cf. Aldridge 2012). The subject is always raised to a position preceding the modal verb, i.e. the matrix C/T. Most modals seem to be raising verbs in LAC and EMC; possible exceptions are the ability modal *néng* (example (3)), and volitional modals such as 欲 *yù*. Control constructions generally have non-finite TP complement clauses.

- (3) 建信者安能以無功惡秦哉? 不能以無功惡秦, (*zhànguó cè* 18/14/1, end of LAC)

Jiàn\_Xin\_zhě\_ān\_néng\_yǐ\_wú\_gōng\_è\_Qín\_zāi?  
 Jian\_Xin\_NOM\_how\_NENG\_YI\_not.have\_merit\_bad\_Qin\_SFP?  
 bù\_néng\_yǐ\_wú\_gōng\_è\_Qín, ...  
 NEG\_NENG\_YI\_not.have\_merit\_bad\_QIN

*Regarding Jian Xin, how would he be able to treat Qin badly without any merit? If he is not able to treat Qin badly without any merit, ...*

That *dāng* is a raising verb can be evidenced by the passivization test (Ademola-Ademoye 2011). Additionally, the auxiliary verb constructions show a semantic sensitivity of the subject rather to the complement verb than to the modal; this is typical for raising constructions (Lin 2011). In the examples in (4) with *DANG*, the complement *vP* includes *YI*-phrases and different adverbial phrases. The adverbials express manner, but also the frequency of the event expressed by the matrix verb. These adverbs have been proposed to be located in *vP* (e.g. Meisterernst 2015, 2016), when they immediately precede the verb. However, this is not necessarily the case in the examples presented below. In a. the complement of *DANG* consists of an *YI*-phrase at the edge of *vP* and the fully lexicalized verb 以為 *yǐwéi*. In b. the *YI*-phrase and the entire *vP* are preceded by the frequency adverb 復 *fù*. And in c. the manner adverb 一心 *yīxīn* 'whole-heartedly' precedes the a complex VP consisting of two coordinated disyllabic verbs and their internal argument.

- (4)a. 有愧於彼。於彼有畏。當以此答以為歸依. (*taishō* 1, 1, p. 91c, EMC, 5th c. CE)

yǒu\_kuì\_yú\_bǐ,\_yú\_bǐ\_yǒu\_wèi,\_dāng\_yǐ\_cǐ\_dá\_yǐwéi\_  
 guīyī  
 have\_shame\_PREP\_that,\_PRE\_that\_have\_fear,\_DANG\_YI\_  
 this\_  
 answer\_consider\_trust

*There is shame in that, and in that there is fear, one should consider this answer as entirely trustworthy.*

<sup>7</sup>There are exceptions to this rule in which the *YI*-phrase probably moved to an external focus position.

- b. 今當復以譬喻更明此義，諸有智者以譬喻得解。 (*taishō* 9, 262, p. 12b, EMC, 5th c. CE)  
 Jīn\_dāng\_fù\_yǐ\_pìyù\_gēng\_míng\_cǐ\_yì,\_  
 Now\_DANG\_again\_YI\_simile\_more\_clarify\_this\_meaning,\_  
 zhū\_yǒu\_zhì\_zhě\_yǐ\_pìyù\_déjiě  
 PL\_have\_wisdom\_NOM\_YI\_simile\_attain\_understanding  
*Now, you should again clarify this meaning even more with a simile, so that all those who know attain understanding with [the help of] this simile.*
- c. 舍利弗!汝等當一心信解受持佛語。 (*taishō* 9, 262, p. 7c)  
 Shèlìfú!Rǔ\_děng\_dāng\_yīxīn\_xìnjiě\_shòuchí\_fó\_yǔ  
 Shelifu!\_You\_PL\_DANG\_one-heart\_trust\_hold.on\_Buddha\_speech  
*Shelifu! You should whole-heartedly trust and hold on to the Buddha's words.*

In the examples in (5) the modal verb *yīng* takes complex predicates of the same kind as *dāng* does as its complement. In a. the complement of BU YING includes a prepositional phrase with 於 *yú*; in b. YING has a complement containing an YI-phrase. In c. the complement contains a manner adverbial, the modal verb is preceded by the aspectual adverb 常 *cháng*, and in d. the combination of DANG and YING has three coordinated VPs as their complement; each of them modified by an adverbial phrase as its complement.

- (5)a. 又菩薩摩訶薩不應於女人身取能生欲想相而為說法，亦不樂見。 (*taishō* 9, 262, p. 37b)  
 Yòu\_púsà\_móhēsà\_bù\_yīng\_yú\_nǚ\_rén\_shēn\_qǔ\_néng\_  
 Again\_bodhisattva\_mahasattva\_NEG\_YING\_PREP\_female\_  
 human\_body\_take\_able\_  
 shēng\_yùxiǎng\_xiàng\_ér\_wèi\_shuō\_fǎ\_yí\_bù\_lèjiàn  
 produce\_lust\_condition\_CON\_BEN\_explain\_dharma,  
 also\_NEG\_desireous  
*Again, the bodhisattvas and the mahasattvas should not obtain the capacity of producing a state of lust amongst the women and talk to them about the dharma, this is also not desirous.*
- b. 汝若見有受持是經者，應以青蓮花盛滿末香，供散其上。 (*taishō* 9, 262, p. 54c)  
 rǔ\_ruò\_jiàn\_yǒu\_shòuchí\_shì\_jīng\_zhě,  
 you\_if\_see\_have\_hold.on\_this\_sutra\_REL,\_  
 yīng\_yǐ\_qíng\_liánhuā\_chéngmǎn\_mòxiāng\_gōngsàn\_qí\_shàng  
 YING\_YI\_blue\_lotus\_filled.up\_incense\_powder\_offer\_his\_  
 superior  
*If you see those who hold on to this sutra, you should offer blue lotus filled up with incense powder to their superior.*



- c. 於十方諸大菩薩，常應深心恭敬禮拜。(taishō 9, 262, p. 38b)  
 yú\_shí\_fang\_zhū\_dà\_púsà,\_cháng\_yīng\_shēn\_xīn\_  
 gōngjìng\_lǐbài  
 PREP\_ten\_direction\_PL\_great\_bodhisattva,\_always\_YING\_  
 deep\_heart\_worship\_respect  
*Towards the great bodhisattvas of the ten directions, one should always show worship and respect with a deep heart.*
- d. 聞如是經，勿生疑惑。應當一心、廣說此經，世世值佛，疾成佛道。』  
 Wén\_rúshì\_jīng,\_wù\_shēng\_yíhuò,\_yīng\_dāng\_yīxīn\_  
 guǎng\_shuō\_cǐ\_jīng  
 Hear\_such\_sutra,\_NEG<sub>mod</sub>\_bear\_doubt,\_YING\_DANG\_one\_  
 heart\_wide\_talk\_this\_sutra  
 shì\_shì\_zhí\_fó\_jí\_chéng\_fó\_dào  
 Generation\_generation\_meet\_Buddha\_quick\_complete\_  
 Buddha\_way  
*If you hear such a sutra, don't doubt, you should whole-heartedly and widely preach this sutra, generation for generation meet the Buddha and quickly complete the way of the Buddha. (taishō 9, 262, p. 51c)*

### 8.3.2 Finiteness Features of the Clause Embedded by DANG and YING

Modal auxiliary verbs in LAC by default only have vP complements. In EMC, the complement of the modal auxiliaries DANG and YING can be very complex, and they apparently can also have CP complements.<sup>8</sup> With a vP complement, the subject is always the subject of the matrix verb; this is typical for raising constructions (Lin 2011). The subject can be a theme, an experiencer, or an agent depending on the structure of the complement VP and it has to precede the modal verb in order to check nominative case in CP/TP. The scope of sentence final particles demonstrates that it is always the modal verb, which is within the scope of the SFP, and not the complement clause. This argues for a non-finite complement clause according to Lin (2011) and against an epistemic reading of the modals. The scope of SFPs in LAC and Early Middle Chinese still requires more investigation, but so far, only those SFPs which are lowest seem to be available for this test (based on Rizzi's 1997 split CP hypothesis); these are the SFPs 矣 yǐ and possibly 也 yě in LAC and EMC. Question and exclamation particles are higher and take the entire CP in their scope. This has been demonstrated for Modern Mandarin e.g. by Paul (2014, 2015), and it can be demonstrated for LAC by the examples in (6) which both contain a SFP expressing force; these have the entire CP in their scope. In a. the aspectual negative marker 未 wèi is present, but in contrast to yě in (7) which only scopes

<sup>8</sup>The modal verb 得 dé in LAC also occasionally has CP complements. These are not discussed here.

over the TP including *wèi*, the SFP 邪 *yé* in (6) a. scopes over the verb 謂 *wèi* ‘mean’ and accordingly over the entire CP.

- (6)a. [謂[伯有命[未[當[死[而[人殺之]邪]]]]]]? (*lùnhéng* 63.12.18, EMC, 1st c. CE)

*wèi* \_Bó\_ *Yǒu* \_mìng\_ *wèi* \_dāng\_ *sǐ* \_ér\_ *rén* \_shā\_ *zhī* \_*yé*  
 mean\_ *Bó* \_*Yǒu*\_ destiny\_ NEG<sub>Asp</sub>\_ DANG\_ die\_ CON\_ man\_  
 kill\_ OBJ\_ SFP

*Does it mean that Bó Yǒu according to his destiny should not have died yet/ faced death yet, but someone killed him?*

- b. [希[王[當[相惠而奪吾食]乎]]]。 (*taishō* 3, 152, p. 1b, EMC, 3rd c. CE)

*Xī* \_wáng\_ *dāng* \_xiāng\_ *zhuān* \_ér\_ *duó* \_wú\_ *shí* \_hū  
 hope\_ wang\_ DANG\_ XIANG\_ concentrate\_ CON\_ rob\_ my\_  
 food\_ SFP<sub>quest</sub>

*I hope that the king should/will concentrate and rob my food!?* (probably future)

In example (7) the aspectual negative marker *wèi* occurs in combination with *yě*, this is the default distribution of LAC. It provides evidence for the final particle having wide scope over DANG. It also provides evidence for a position of DANG within TP and not higher in these examples. According to Tsai (ms.) the Modern Mandarin equivalent of *wèi*, 沒 *méi* is not compatible with deontic modals. He proposed that this may be due to the fact “that they are in complementary distribution in the inflectional layer.” Examples with *wèi* are not infrequent in the LAC and EMC literature; 未當 *wèi dāng* can appear without a complement, it can be followed by an NP and a VP complement; thus it cannot be excluded that *dāng* is still hosted in the lexical layer. This will be discussed below.<sup>9</sup>

- (7) 山東雖亂，秦之地可全而有，宗廟之祀[未[當[絕]也]] (*shǐjì*: 6276, EMC, 100 BCE)

*shān* \_dōng\_ *suī* \_luàn\_, *Qín* \_zhī\_ *dì* \_kě\_ *quán*\_  
 mountain\_ east\_ even.if\_ chaos\_, *Qín* \_SUB\_ *land* \_can\_ complete  
*ér* \_yǒu\_, *zōng* \_miào\_ *zhī* \_sì\_ *wèi*  
 CON\_ have\_, *ancestor* \_ancestral.temple\_ *SUB* \_sacrifice\_ *NEG<sub>asp</sub>*  
*dāng* \_jué\_ *yě*

DANG\_ cut.off\_ SFP

*And even if there was chaos east of the mountains, the territory of Qín could have been kept entire, and the sacrifices of the ancestral temples should not have been interrupted (yet).?*

*Paraphrase: were not yet in the appropriate state to be interrupted.*

<sup>9</sup>Modals in the lexical layer belong to the category of Modal<sub>2</sub>, discussed below. According to Coupé and van Kemenade (2009) non-verbal complementation provides evidence for the status of Modal<sub>2</sub>.

The examples in (8) contain the SFP 矣 *yǐ*. In LAC this final particle has functions comparable to sentence final 了 *le* in Modern Mandarin (Pulleyblank 1995; Meisterernst 2015); its function is associated with perfect/perfective aspect and a change of state reading. Lin (2011) uses the scope of *le* in Modern Mandarin to determine the finiteness features of the complement clause of modals (see also Erlewine 2017 for the position of *le*). Lin's approach has been adopted in the present study. The examples demonstrate that the modal is always within the scope of *yǐ*. The semantics involved are: 'the situation being the way it is, an obligation to act in a particular way has arisen YI'.

- (8)a. 重曰。吾[當[[懷其真][處其安]]矣]。 (*taishō* 3, 152, p. 47b, EMC, 3rd c. CE)  
 Chóng\_yuē\_wú\_dāng\_huái\_qízhēn\_chǔ\_yí\_ān\_yǐ  
 Again\_say: I\_DANG\_care\_truth\_dwell\_peace\_SFP  
*He said once more: I should care about that truth and dwell in that peace.*
- b. 假使世尊說三行者。便[當[奉行於二事]矣]。  
 Jiǎshǐ\_shìzūn\_shuō\_sān\_xíngzhě,  
 If\_world-honored-one\_explain\_three\_activities\_NOM,  
 biàndāng\_fèngxíng\_yú\_èr\_shì\_yǐ  
 then\_DANG\_practice.with.sincerity\_PREP\_two\_affair\_SFP  
*If the World-Honored-One explained these three kharmic activities, then we should perform them with sincerity with regard to the two affairs. (taishō 15, 585, p. 25c), EMC, 3rd-4th c. CE)*

In a number of examples with the SFP *yǐ*, future reference is more prominent than the deontic modal reading of DANG as in the examples in (9). Both examples have a 1st person subject; this is the most frequent feature of future DANG. (9b) also indicates that the scope of YI does not include epistemic 必 *bì* and thus possibly does not go beyond TP; this has also been proposed for Modern Mandarin *le* in Erlewine (2017).

- (9)a. 至其年二月八日。忽告眾曰。吾[當[去]矣]。 (*taishō* 50, 2059, p. 351c, early 6th c.)  
 Zhì\_qínián\_èryuè\_bā\_rì,\_hū\_gào\_zhòng\_yuē:wú\_dāng\_qù\_yǐ  
 At\_that\_year\_two\_month\_eight\_day,\_suddenly\_tell\_multitude\_say: I\_DANG\_leave\_SFP  
*In the second month on the eighth day he suddenly told the multitudes, "I will leave."*
- b. 「君若不得菴羅果，我必[當[死]矣]。」 (*taishō* 24, 1462, p. 787b, early 6th c.)  
 jūnruò\_bùdé\_ānluòguǒ,\_wǒ\_bìdāng\_sǐyǐ  
 You\_if\_NEG\_get\_mango\_fruit,\_I\_certainly\_DANG\_die\_SFP  
*If you, my husband, does not get the mango, I will certainly die ⇒ 'it is certain that the situation will arise that I die' ≠ 'it has become certain that I will die.'*

The scope facts of the SFP *yǐ* are the same with *YING* as they are with *DANG*. The examples in (10) demonstrate that *yǐ* always scopes over the modal auxiliary verb. The circumstances are always such that the necessity for the event in the scope of the modal verb arises.

- (10)a. 吾等[應[為稽首稟化之]矣]。 (*taishō* 1, 76, p. 883b, 3rd c., EMC, 5th c. CE)  
 Wú\_děng\_yīng\_wéi\_jīshǒu\_bǐn\_huà\_zhī\_yǐ  
 I\_PL\_YING\_make\_kowtow\_receive\_change\_OBJ\_SFP  
*We should kowtow and receive and change them.*
- b. 爾時則有惡[應[變怪現]矣]。 (*taishō* 3, 154, 82c, EMC, 3rd c. CE)  
 ěr\_shí\_zé\_yǒu\_è\_yīng\_bìan\_guài\_xiàn\_yǐ  
 that\_time\_then\_have\_bad\_YING\_change\_strange\_appearance\_SFP  
*If there was something bad at that time, one should change the strange appearance.*

### 8.3.3 The Hierarchical Position of *DANG* and *YING* as Deontic Modals

First, the position of the modals *DANG* and *YING* with regard to negation and the semantic scope of negation will be discussed. As already mentioned, whereas *NEG*+*YING* is regularly attested, *NEG*+*DANG* is very infrequent in the Buddhist literature (Zhu 朱冠明 2008), but it regularly occurs in the non-Buddhist literature. The combination with the aspectual negative marker *wèi* [see example (6a) repeated here as (10)], which argues for a position of *DANG* within or below TP, is altogether not very frequent; instances without a complement, or with an NP or a VP complement are attested; only 5 instances of *wèi dāng* are attested in the entire Early Buddhist corpus. Contrastingly, *wèi* frequently negates possibility modals (140x 未能 *wèi néng*; 24x 未可 *wèi kě*; 475x 未得 *wèi dé*; additionally, 15x 未應 *wèi yīng*). This fact may provide some indirect evidence for an early grammaticalization of *DANG* in the sense of an upward movement to the TP layer, which hosts deontic modality.

- (10) [謂[伯有命[未[當[死[而[人殺之]邪]]]]]]? (*lùnhéng* 63.12.18, EMC, 1st c. CE)  
 wèi\_Bó\_Yǒu\_mìng\_wèi\_dāng\_sǐ\_ér\_rén\_shā\_zhī\_yé  
 mean\_Bó\_Yǒu\_destiny\_NEG<sub>Asp</sub>\_DANG\_die\_CON\_man\_kill\_OBJ\_SFP  
*Does it mean that Bó Yǒu according to his destiny should not have died yet/ faced death yet, but that someone killed him?*

Cormack and Smith (2002) point to the relevance of the semantic scope of negation in order to distinguish between modals in the lexical layer (Modal<sub>2</sub>), the layer in which dynamic modality is generated, and modals in the TP layer (Modal<sub>1</sub>), where deontic modality is generated.<sup>10</sup> They propose a functional head Pol(arity) (POS/NEG) in TP which divides modals into these two groups: (1) Modal<sub>1</sub> in the pre-Pol (POS/NEG) position = deontic modality (necessity), scoping over negation; (2) Modal<sub>2</sub> in the post-Pol position = dynamic/circumstantial) modality (possibility) below the scope of negation. Meisterererst (2016, 2017a) propose that this can account for the divide between the two different readings of possibility modals in LAC in combination with negation: (a) the deontic reading, scoping over negation, and (b) the circumstantial reading, within the scope of negation. Deontic reading of possibility modals is only available in combination with negation or in rhetorical questions. True deontic modals only develop in the early Middle Chinese period, they typically scope over negation. Despite the fact that the negative marker always precedes modal verbs, different scopal features can be observed as in the examples in (11) and (12). The necessity modal 應 in (11) scopes semantically over negation, although the negative marker precedes the modal.<sup>11</sup> This contrasts with the modal verbs of possibility 可 kě ‘can, possible’ and 得 dé ‘obtain, can, manage to’, which, in the circumstantial modal reading in (12)a. and b., appear within the scope of negation.<sup>12</sup> In none of the examples the deontic necessity reading ‘necessary not’ is implied, no obligation is expressed.

- (11) 王告之言：『象若不調，不應令吾乘之；(taishō 4, 0202, p. 372c, EMC, 5th c. CE)

Wáng gào zhī yán xiàng ruò bù tiáo, bù yīng líng  
wú chéng zhī

King tell OBJ say elephant if NEG tame, NEG YING  
make me ride OBJ

The king told him: “If the elephant is not tamed, you should not make me ride it.”

This can be paraphrased ‘since the elephant is not tamed, it is required that you do not make me ride it.’

不應 = ‘NOT[SHOULD]’ with the meaning: ‘NECESSARY/SHOULD[NOT]’, necessity operator

- (12)a. 此城最勝。諸方所推。不可破壞。(taishō 1, 1, p. 12, EMC, 5th c. CE)

Cǐ chéng zuì shèng, zhū fāng suǒ tuī, bù kě pòhuài

<sup>10</sup>These layers have also been proposed in Tsai’s (2015) cartographic approach to modals, which is based on Rizzi (1997).

<sup>11</sup>The precise syntactic analysis of the regular position of the negative marker still has to be figured out. But the development of deontic readings of modals of possibility in combination with negation has probably been triggered by the fact that there was a syntactic position for deontic negative markers outside vP in Archaic Chinese.

<sup>12</sup>The same probably also holds true for the modal verb 能 néng.

This\_\_city\_\_most\_\_superior,\_\_PL\_\_direction\_\_REL\_\_press,\_\_NEG\_\_  
KE\_\_destroy

*This city is most superior, from whatever direction it is pushed against, it cannot be destroyed = it is NOT POSSIBLE that it is being destroyed.*

NOT[POSSIBLE: root/circumstantial possibility.

- b. 我等梵天所化。是以無常。不得久住。(taishō 1, 1, p. 69b)

Wǒ\_\_děng\_\_fàntiān\_\_suǒ\_\_huà,\_\_shìyǐ\_\_wúcháng,\_\_bù\_\_dé\_\_jiǔ\_\_zhù  
I\_\_PL\_\_Brāhma\_\_REL\_\_change,\_\_therefore\_\_impermanent,\_\_NEG\_\_can\_\_  
long\_\_stay

*We are who god Brahmā changed, therefore we don't have permanence and cannot remain long = we do NOT MANAGE to remain long.*

NOT[POSSIBLE: circumstantial.

Negation is the necessary trigger for a deontic reading, i.e. for a prohibition; double negation particularly with *kě* 'NEG+KE+NEG', is the most frequent way to express a strong obligation in LAC (e.g. Meisterernst 2008) as in example (13). The scope of negation allows a syntactic distinction between the function of original possibility modals as Modal<sub>1</sub> or Modal<sub>2</sub> respectively. Assuming Cormack's and Smith's (2002) proposal of a polarity head, the deontic or dynamic readings emerge depending on the position preceding or following the Pol head of the modal.

- (13) 四鄰諸侯之相與, 不可以不相接也, 然而不必相親也,

Sì\_\_lín\_\_zhūhóu\_\_zhī\_\_xiāng\_\_yǔ,\_\_bù\_\_kěyǐ\_\_bù  
Four\_\_neighbour\_\_feudal.lord\_\_GEN\_\_mutual\_\_be.close,\_\_NEG\_\_  
KEYI\_\_NEG

xiāng\_\_jiē\_\_yě,\_\_ránér\_\_bù\_\_bì\_\_xiāng\_\_qīn\_\_yě  
mutual\_\_connect\_\_SPF,\_\_but\_\_NEG\_\_BI\_\_mutual\_\_close\_\_SFP

*Regarding the relation between [the ruler and] the feudal lords from the four neighbouring directions, they must [cannot not] be mutually connected, but they do not have to be close to each other. (xúnzǐ 12.10.6, LAC, 3rd c. BCE)*

Paraphrase: it is NOT possible that they are NOT mutually connected = it is NECESSARY (Pol[pos]) that they are mutually connected.

NOT POSSIBLE NOT = NECESSARY[POS

The examples in (14) with a negative polarity head, expressed by simple negation, and a positive polarity head in double negation, respectively, demonstrate that negation or the positive polarity head are always within the scope of the deontic modals DANG and YING, even if the negative marker precedes the modal. This argues for a position of deontic modals above the vP layer.<sup>13</sup>

<sup>13</sup>It is possible that the synthetic modal negative markers, which have deontic readings and accordingly should differ syntactically from the non-modal negative markers, serve as a trigger for NEG+AUX<sub>mod</sub> to move up to this position.

(14)a. 又人子禮，不應竭用父母庫藏令其盡也。 (*taishō* 4, 202, p. 411b, EMC, 5th c. cE)

Yòu\_rén\_zǐ\_lǐ,\_bù\_yīng\_jié\_yòng\_fù\_mǔ\_  
Again\_man\_son\_propriety,\_NEG\_YING\_exhaust\_use\_father\_mother\_

kùzàng\_líng\_qí\_jǐn\_yě  
treasure.house\_make\_GEN\_exhaust\_SFP

*Furthermore, according to the proper behaviour for a son, he should not completely use up his parents' treasure house and cause it to be used up completely.*

NECESSARY/SHOULD[NOT]: highly normative, deontic.

b. 從其聞者。不應不信。亦不應毀。 (*taishō* 1, 1, p. 17c, EMC, 5th c. CE)

Cóng\_qí\_wén\_zhě,\_bù\_yīng\_bù\_xìn,\_yì\_bù\_yīng\_huǐ  
follow\_

GEN\_hear\_NOM,\_NEG\_YING\_NEG\_believe,\_also\_NEG\_YING\_destroy

*Following what he heard, he should believe it, and he also should not destroy it.*

'SHOULD[POS]' contrasting to 'SHOULD[NOT]'

Since the evidence for this proposal relies solely on the semantic scope of negation, which in the case of deontic modality differs from its syntactic position, the remaining part of this section tries to provide some purely syntactic evidence for the claim made. In the following, the position of *DANG* and *YING* will be checked against two adverbial *wh*-words, which supposedly appear outside *vP*. These are the adverbials 云何 *yúnhé* 'how, in which way' and 以何 *yǐhé* 'how, by which, in which way'. Both are most similar to instrumental *how* in Modern Mandarin, according to Tsai's (2008) analysis of *how* and *why* alternation in Chinese. According to Tsai (2008) instrumental *wh*-words appear in the TP layer in the periphery of *vP*, following modals. *Wh*-words in LAC by default follow aspectual and temporal adverbs (Meisterernst 2015), but precede modal auxiliary verbs. Thus, the position of a *wh*-words following the modals *DANG* and *YING* provides some evidence for their upward movement out of the lexical and to the TP layer, where they can express deontic modality or—in the case of *DANG*—also future tense. In the early Middle Chinese period, the constraint on *wh*-words referring to the internal argument to appear in pre-verbal position weakens (Aldridge 2013 (MC)) and they occasionally appear between modal verbs and the matrix verb. Eventually, around the end of the Han period they regularly appear in situ. The change of position of the *wh*-word has been connected to the loss of movement. However, apparently the intermediate position between modal and matrix verb is not available for all modal verbs. For the dynamic modals *kě*, *néng*, and *dé*, which appear in the lexical layer in default environments, no, or hardly any instances with a *wh*-word appearing between modal and matrix verbs (*\*dé kě(yǐ) shuǐ/hé V*, *néng shuǐ/hé V* (1 instance), *\*dé shuǐ/hé V*) seem to be attested. (15a) is a very early

example of modal DANG, and the earliest example of the modal preceding the interrogative 誰 *shuí*. In b. the *wh*-phrase appears in the default position following the future adverb 將 *jiāng*.

- (15)a. 今四者不足以使之，則望當誰為君乎？ (*hán fēizǐ* 34.11.05, LAC, 3rd c. BCE)

Jīn sì zhě bù zú yǐ shǐ zhī,  
Now four NOM NEG suffice YI employ 3OBJ,  
zé wàng dāng shuí wéi jūn hū  
then expect DANG WHOM be ruler SFP

*If these four are not good enough to employ them, to whom should I expect to be a ruler then?*

- b. 若死者有知，我將何面目以見仲父乎？

ruò sǐ zhě yǒu zhī, wǒ jiāng hé miàn mù yǐ jiàn  
Zhòngfù hū  
if dead NOM have knowledge, I FUT which face eye  
YI see

Zhongfu SFP

*If the deceased have knowledge, which what eyes will I look at Zhongfu then?* (*lǚshì chūnqiū* 16.03.02, LAC, 3rd c. BCE)

Adverbial *wh*-words always appeared in preverbal position, no change of position seems to be involved from LAC to EMC. First, the adverbial *yínhé* is being discussed in the following examples.

In LAC *yínhé* can appear in different, mostly predicative positions, in the Early Buddhist literature it is frequently attested as an adverbial *wh*-word preceding or in the complement of DANG. With YING *yínhé* is only occasionally attested; it appears in both syntactic position, the pre-modal and the post-modal positions. The examples in (16) represent typical instances of *yínhé* following DANG, expressing a real request about the way, in which to fulfil an obligation: DANG has scope over the question marker:

SHOULD [IN WHICH WAY ...

- (16)a. 設有是問者。汝當云何答。 (*taishō* 1, 1, p. 112b, EMC, 5th c. CE)

Shè yǒu shì wèn zhě, rǔ dāng yínhé dá  
If have this question REL, you DANG how answer

*If there are any with these questions, in which way should you answer?* → You should answer with the following speech ...

- b. 「我當云何令諸眾生心歡喜耶？」 (*taishō* 3153, p. 62c, 3rd c.)

Wǒ dāng yínhé líng zhū zhòng shēng xīn huānxǐ yé  
I DANG how make PL multitude living heart happy  
SFP<sub>quest</sub>

*In which way should I make all the living beings happy in their hearts?* → I should do the following ...

- c. 是故佛道不當於中住。舍利弗心念言。佛當云何住。

Shìgù fó dào bù dāng yú zhōng zhù,



Therefore\_Buddha\_way\_NEG\_DANG\_PREP\_middle\_live,  
 Shèlifú\_xīn\_niàn\_yán,\_fó\_dāng\_yúnhé\_zhù  
 Shariputra\_heart\_think\_say,\_Buddha\_DANG\_how\_live  
*Therefore, the Buddha according to the way should not live in the middle.  
 And Shariputra thought in his heart, in which way should the Buddha live?*  
 (taishō 8, 224, 429b, EMC, 2nd c. CE)

The interrogative adverbial also occurs in rhetorical questions. In these instances, a negative marker can appear in the complement of DANG as in (17).

- (17) 是菩薩今當云何不墮想顛倒、見顛倒、心顛倒?  
 Shì\_púsà\_jīn\_dāng\_yúnhé\_bù\_duò\_xiǎng\_diǎndào,  
 This\_bodhisattva\_now\_DANG\_how\_NEG\_fall\_  
 conceptualization\_distortion  
 jiàn\_diǎndào,\_xīn\_diǎndào  
 view\_distortion,\_heart\_distortion  
*These bodhisattvas, how would they not fall into the distortion of conceptualization, the distortion of the views and the heart?* (taishō 8, 224, 548a, EMC, 5th c. CE)

More frequently *yúnhé* precedes DANG, but the semantics involved are different, the *wh*-word scopes over DANG and DANG seems to express rather a future possibility:

HOW [WILL/COULD ...

This is evidenced by the examples in (18). This meaning becomes particularly obvious when the complement contains a possibility modal as in b. In all examples the deontic reading of DANG is weak, if existent at all.

- (18)a. 世尊制戒不得浴。我等云何當浴。佛言。從今日後聽雨時浴。  
 Shìzūn\_zhìjiè\_bù\_dé\_yù.\_Wǒ\_děng\_yúnhé\_dāng\_yù.  
 Shizun\_prescription\_NEG\_DE\_bathe.\_I\_PL\_how\_DANG\_  
 bathe  
 Fó\_yán\_cóng\_jīn\_rì\_hòu\_tīng\_yǔ\_shí\_yù\_  
 Buddha\_say\_from\_today\_day\_after\_hear\_rain\_time\_bathe  
*Following the prescriptions of the World-Honored-One we are not allowed to bathe. How will/can we bathe then? The Buddha said, "From now one you bathe when you hear the rain."* (taishō 22, 1425, 372b, EMC, 4th/5th c.)
- b. 此比丘唯知此一偈。云何當能教誡我等。 (taishō 22, 1421, 46a, EMC, 5th c.)  
 Cǐ\_bìqiū\_wéi\_zhī\_cǐ\_yī\_jì,\_yúnhé\_dāng\_néng\_jiàojiè\_  
 wǒ\_děng  
 This\_bhikṣu\_only\_know\_this\_one\_gatha,\_how\_DANG\_  
 able\_teach\_I\_PL  
*This bhikṣu knows only this one gatha, how will he be able to advise us?*

The examples in (19) represent the two different positions of *yúnhé* with regard to YING in an almost minimal pair. This combination is very infrequent in the early Buddhist literature and the difference between the two readings can be quite subtle.

- (19)a. 世尊!應云何敬視般若波羅蜜?」 (*taishō* 8, 227, 549c, EMC, 5th c.)  
 Shizūn\_\_yīng\_\_yúnhé\_\_jìng\_\_shì\_\_bōrě\_\_bōluómì  
 Buddha!\_\_YING\_\_which.way\_\_respectful\_\_look\_\_prajñā-pāramitā  
 World-Honored-One! In which way should we look respectfully at the perfection of wisdom?

SHOULD [IN WHICH WAY ...

- b. 「世尊!新發意菩薩,云何應學般若波羅蜜?」 (*taishō* 8, 227, 561a, EMC, 5th c.)  
 Shizūn!\_\_xīn\_\_fāyì\_\_púsà,\_\_yúnhé\_\_yīng\_\_xué\_\_bōrě\_\_bōluómì  
 Buddha!\_\_New\_\_resolve.on\_\_bodhisattva,\_\_how\_\_YING\_\_learn\_\_prajñā-pāramitā  
 World-Honored-One, how can/will the newly resolved bodhisattvas learn the perfection of wisdom?

HOW [WILL/CAN

Genuine circumstantial possibility modals such as 得 *dé* in example (20) by default follow *yúnhé*. The order *yúnhé dé* is attested, but the order *dé yúnhé* is not. The same facts account for the possibility modal 能 *néng*. This provides a strong argument for the differences in position at least of strictly deontic DANG from possibility modals.

- (20) 如此眾生染著諸使。云何得免生死苦惱。 (*taishō* 4, 212, 633c, EMC, 4th c.)  
 Rúcǐ\_\_zhòng\_\_shēng\_\_rǎnzhùo\_\_zhūshǐ,\_\_  
 Such\_\_multitude\_\_being\_\_defiled.attachment\_\_various.declivities  
 yúnhé\_\_dé\_\_miǎn\_\_shēng\_\_sǐ\_\_kǔnǎo  
 how\_\_can\_\_avoid\_\_life\_\_death\_\_pain\_\_distortion  
 All those living beings have defiled attachments and various declivities, how can they avoid the circle of life and death, pain and distortion?

The syntactic distribution and the scope facts of the adverbial *wh*-word 以何 *yǐhé* are very similar to *yúnhé*. In the LAC corpus the combination *yǐhé* only appears infrequently in particular syntactic contexts (以 ... 為 *yǐ* ... *wéi* and *hé* as a modifier of an NP). The order becomes more frequent in EMC when object *wh*-pronouns start to appear *in situ*. At this time, two different variants of the adverbial: *yǐhé* and *héyǐ* exist. Whereas *héyǐ* is still a common adverbial *wh*-word ‘how, why’ in Modern Mandarin, *yǐhé* ‘how’ is not. In contrast to *yúnhé*, *yǐhé* always follows DANG as in the examples in (21). The combination is extremely infrequent with YING. It also follows the marker of future of LAC and Early Middle Chinese 將 *jiāng*, which may occupy a position similar to DANG, as in example (21c).

- (21)a. 汝今日請二部僧。我等當以何報之。 (*taishō* 22, 1425, 531b, 5th c.)  
 Rǔ\_jīn\_rì\_qǐng\_èr\_bù\_sēng,\_wǒ\_děng\_dāng\_yǐhé\_bào\_zhī  
 You\_now\_day\_ask\_two\_section\_monk,\_I\_PL\_DANG\_how\_  
 respond\_OBJ  
*If you now ask the two kinds of monks, how should we respond to them?*
- b. 今為道，當以何為大戒而得長成乎? (*tàipíngjīng* 98: 156, EMC, ca. 2nd c. CE)  
 Jīn\_wéi\_dào,\_dāng\_yǐhé\_wéi\_dàjiè\_  
 Now\_do\_way,\_DANG\_how\_make\_full.set.of.precepts\_  
 ér\_dé\_zhǎngchéng\_hū  
 CON\_obtain\_mature.achievement\_SFP  
*Now, in performing the DAO, how should one follow the full set of precepts and obtain maturity?*
- c. 未曉輕侮之法將以何禁? (*hòu hànshū* 44: 2825, EMC, 5th c. CE)  
 Wèi\_xiǎo\_qīngwǔ\_zhī\_fǎ\_jiāng\_yǐhé\_jìn  
 NEG<sub>asp</sub>\_clarify\_insult\_GEN\_rule\_FUT\_how\_prevent  
*If one has not clarified the rules of insult, how would one prevent it?*

In contrast to the deontic verbs DANG and YING, 以何 *yǐhé* by default precedes the verbs of circumstantial possibility 得 *dé* and 能 *néng* as in example (22), instances of DE/NENG *yǐhé* are not attested. This demonstrates that *yǐhé* in EMC is not syntactically identical with *yǐ* NP, which by default follows possibility modals. It again provides a strong argument for the higher syntactic position of DANG and YING.

- (22) 諸欲患如是，以何能捨之? (*taishō* 46, 1915, 464a, EMC, 6th c.)  
 Zhū\_yù\_huàn\_rú\_shì,\_yǐhé\_néng\_shě\_zhī  
 PL\_wish\_anxiety\_like\_this,\_how\_able\_abandon\_3OBJ  
*If all wishes and anxieties are like that, how can one be able to abandon them?*

More research has to be conducted on the position of adverbial *wh*-words and the syntactic differences involved with different positions (see also Tsai 2008). But we can see already that the examples with the two adverbial *wh*-words provide additional and purely syntactic evidence for two different positions of modal verbs in LAC. The genuinely deontic modals are allowed to appear in a position above the *wh*-words *yínhé* and *yǐhé*, whereas circumstantial modals, such as *dé* and *néng* always follow them. This fact also provides some evidence for different readings of the modal DANG depending on the position of the adverbial *yínhé*. This is not surprising, since all modal verbs start out as lexical verbs, generated in the lexical layer, i.e. in *vP*. As deontic modal markers they appear in the grammatical layer following the path of grammaticalization proposed in Roberts and Roussou (2003) as an upward moving and change from a lexical to a functional head.

## 8.4 應 YING ‘Should’ and 當 DANG ‘Should; Will’ in *Dharmagupta-Vinaya*

*Dharmagupta-Vinaya*, which was translated into Chinese during the timeframe ranging from 317CE to 420CE, is a collection of precepts which are still prevailing in modern Buddhist traditions. Since precepts are stipulations imposed on Buddhist monastics, regarding what is allowed to do and what is disallowed to do, we expect to find abundant examples of modal usages therein. This is borne out, as both 應 *yīng* ‘should’ and 當 *dāng* ‘should; will’ enjoy high frequencies of their occurrences in the *Dharmagupta-Vinaya*, with 4831 counts of YING ‘should’ and 2467 counts of DANG ‘should; will’. These two modal verbs are utilized, in most cases, when a precept is stipulated, as exemplified in (23) and (24) below.

- (23) 時佛知彼心疲厭，作如是教：『是事應念、是不應念，是應思惟、是不應思惟、是應斷、是應具足住。』 (*sifēn lǚ*, *taishō* 22, 1468, 569a)

Shí fó zhī bǐ xīn pí yàn, zuò rúshì jiào: shì shì yīng niàn,  
then Buddha know that heart tired weary make thus teach  
this thing should think

shì bù yīng niàn, shì yīng sīwéi, shì bù yīng sīwéi,  
this not should think this should contem-  
plate this not should contemplate

shì yīng duàn shì yīng jù zú zhù。

this should abandon this should fully abide

*At that time, the Buddha knew that the monks got weary at heart and thus instructed them: “This is what you should think, while that is what you should not think; this is what you should contemplate on, while that is what you should not contemplate on; this is what you should abandon, while that is the place where you should abide.”*

- (24) 欲說戒者當如是說：若比丘十日未竟夏三月，諸比丘得急施衣，比丘知是急施衣當受，受已乃至衣時應畜。若過畜者，尼薩耆波逸提。 (*sifēn lǚ*, *taishō* 22, 1468, 631a)

Yù shuō jiè zhě dāng rúshì shuō: ruò bǐqiū shí rì wèi jīng

want preach precept person should thus speak if bhikkhu  
ten day not finish

xià sān yuè, zhū bǐqiū dé jí shī yī, bǐqiū zhī shì  
retreat three month PL bhikkhu obtain contingently offer  
robe bhikkhu know be

jí shī yī dāng shòu, shòu yǐ nǎizhì yī shí yīng xù。 ruò  
contingent offer robe should accept accept finish till  
dress time should store if

guò xù zhě, nísàqíbōyítí。 over

store person nissaggiya pācittiya

*Whoever would like to preach precepts should say thus: “If Bhikkhus are contingently offered robes within the last ten days of a rain retreat and if Bikkhus are fully aware of the contingent status of the offering, they can accept the offering. During the interval period between accepting and dressing the robes, Bhikkhus should have robes stored. If robes are stored over this time period, Bhikkhus commit nissaggiya pācittiya.”*

There are, however, crucial differences between YING ‘should’ and DANG ‘should; will’. It seems that YING ‘should’ is more likely to refer to a precept, any transgression of which would incur punishment of varying degrees. By contrast, DANG ‘should; will’ is inclined to express suggestions rather than precepts. Precepts differ from suggestions in that the former is a black-or-white issue, which must be strictly obeyed by monastics as rules. This contrast can be further reflected through their various syntactic behaviors, such as negation, their collocation with different types of subjects and their interaction with *wh*-adverbials.

### 8.4.1 Negation

First, 應 *yīng* ‘should’ can be negated by 不 *bù* ‘not’. In the *Dharmagupta-Vinaya*, among the attested 4831 counts of YING ‘should’, the negative form of 不應 *bù-yīng* ‘not-should; should not’ reaches 1865 hits and accounts for 38.6% among all the occurrences of YING ‘should’. In some cases, the affirmative and negative forms co-occur for the sake of emphasis, as shown in (25). Moreover, among the 1865 counts of *bù-yīng* ‘not-should; should not’, there are 57 counts of 不應不 *bù-yīng-bù* ‘not-should-not; must’, which features double negation and thus emphasizes the addressees’ obligation to obey it. This is exemplified in (25).

- (25) 是故汝應往說戒, 不應不往。(*sifēn lǜ, taishō* 22, 1468, 818a)  
 Shìgù\_rǔ\_yīng\_wǎng\_shuō\_jiè,\_bù\_yīng\_bù\_wǎng.  
 thus\_you\_should\_go\_preach\_precept\_not\_should\_not\_go  
 Thus, you should go for precepts-preaching; you must go.

By contrast, DANG ‘should; will’ does not have one single attested negative form as 不當 *bù-dāng* ‘not-should; should not’ in the *Dharmagupta-Vinaya*. Interestingly, there is one attested form of 當不 *dāng-bù* ‘should-not; should not’, as illustrated in (26). This negative form, however, does not refer to any action that should be avoided as a prescriptive rule. As shown in (26), DANG ‘should; will’ occurs in a concessive clause, as evidenced by the presence of 況 *kuàng* ‘let alone’.

- (26) 離婆多作是念: 「此上座年已老氣力羸劣, 而久坐如是, 況我當不作如是坐。」(*sifēn lǜ, taishō* 22, 1468, 970c)  
 Lípóduō\_zuò\_shì\_niàn:\_cǐ\_shàngzuò\_nián\_yǐ\_lǎo\_qìlì\_léilìè,  
 Revata\_make\_such\_thought\_this\_senior\_age\_already\_old\_  
 strength\_weak  
 Ér\_jiǔ\_zuò\_rú\_shì,\_kuàng\_wǒ\_dāng\_bù\_zuò\_rú\_shì\_zuò

still\_long\_sit\_as\_such

let alone I should not do as such sit

*Revata thinks as such: this senior monk, albeit being old and weak, has been doing sitting meditation for such a long time. How shall I (allow myself to) do without sitting as such?*

A concessive clause is functionally equivalent to a rhetorical question or a(n) (mild) exclamation. Plus, the subject of DANG ‘should; will’ is the first person singular 我 *wǒ* ‘I’, which excludes a prescriptive reading of DANG ‘should; will’ therein. As in the case of (26), modality scopes over a whole proposition that happens to contain negation, i.e., “I do without sitting as such”. This stands in striking contrast with the negative form of YING ‘should’, which scopes over negation and thus functions as a precept.

### 8.4.2 Subjects of Modals

Other than negation, the collocation patterns between subjects and modal verbs is another design feature to distinguish between YING ‘should’ and DANG ‘should; will’. We collect data from the *Dharmagupta-Vinaya* and analyze how the two modals collocate with their subjects, with special regard to persons, as shown in Table 8.1.

First, the two modal verbs can collocate with the first, the second and the third person pronouns, with noticeable preferences. As for YING ‘should’, it is least likely

**Table 8.1** Collocations of subjects and modals YING ‘should’ and DANG ‘should; will’

subjects \ modals		應 <i>yīng</i> ‘should’ (4831)		當 <i>dāng</i> ‘should; will’ (2467)	
		counts	percentage	Counts	percentage
first person	我 <i>wǒ</i> ‘I’	4	0.12%	241	12.00%
	吾 <i>wú</i> ‘I’	0		3	
	我等 <i>wǒ-dēng</i> ‘we’	2		60	
second person	汝 <i>rǔ</i> ‘you’	16	0.39%	19	1.34%
	汝等 <i>rǔ-dēng</i> ‘you; PL’	3		14	
third person	彼 <i>bǐ</i> ‘s/he’	49	1.01%	23	0.93%
	比丘 <i>bīqiū</i> ‘bhikkhu’	166	6.25%	48	3.36%
	僧 <i>sēng</i> ‘monastic’	91		15	
	尼 <i>nī</i> ‘bhikkhuni’	33		12	
	戒師 <i>jièshī</i> ‘preceptor’	6		3	
	世尊 <i>shìzūn</i> ‘Buddha’	6		5	

to co-occur with a first person pronoun, be it singular or plural. By contrast, its collocation with the third person pronoun is almost ten times its collocation with the first person, with its collocation with the second person pronouns lying in between. When it comes to 當 *dāng* ‘should; will’, it features a high percentage of its co-occurrence with a first person pronoun, and this percentage is ten times higher than its collocation with either the second person or the third person pronouns.

Second, when we zoom in the cross-modal differences, we find that it is with the first person pronouns that the two modal verbs exhibit greatest contrasts. Specifically, the percentage of the collocations between DANG ‘should; will’ and the first person pronouns is one hundred times higher than that between YING ‘should’ and the first person pronouns.

Thirdly, other than the third person pronoun, many other nouns can collocate with these two modal verbs. The subjects, such as 比丘 *bǐqiū* ‘Bhikkhu’, 僧 *sēng* ‘monastics’ and 尼 *ní* ‘Bhikkhuni’, are well-expected, as precepts were intended to be stipulated for monastics. However, it is worth mentioning that 世尊 *shìzūn* ‘Buddha’, the one who stipulates rules but who is not the recipient of rules, is also attested to be the subject of both YING ‘should’ and DANG ‘should; will’. But, we can hardly conceive a situation in which the Buddha serves as the addressee of any rule. Upon examining all the examples of 世尊應 *shìzūn-yīng* ‘Buddha should’, we find that all of them occur in direct speeches, in particular, requests made by Bhikkhus towards the Buddha, as exemplified in (27). Some similar cases are attested with DANG ‘should; will’, as shown in (28). Thus, strictly speaking, the subject *shìzūn* ‘Buddha’ should be put in the second person category, rather than the third person category.

(27) 諸比丘如是念：「國土飢餓，世尊應聽界內共食宿。」

Zhū\_bǐqiū\_rúshì\_niàn: guótǔ\_jī'è, shìzūn\_yīng\_tīng\_jiè\_nèi  
PL\_bhikkhu\_thus\_speak\_country\_hungry\_Bhuddha\_should\_  
allow\_monastery\_in  
gòng\_shí\_sù.  
together eat sleep

*The Bhikkhus thus requested: “since hunger prevails in the country, Bhante should allow us to eat and sleep inside the monastery.” (sifēn lǚ, taishō 22, 1468, 876a)*

(28) 白佛言：「唯願世尊，當與我願。」 (sifēn lǚ, taishō 22, 1468, 628c)

Bái\_fó\_yán: wéi\_yuàn\_shìzūn, dāng\_yǔ\_wǒ\_yuàn.  
to\_Buddha\_say\_only\_hope\_Buddha\_should\_to\_me\_wish

*(She) told the Buddha: “I request that Buddha should grant me a wish.”*

### 8.4.3 Stacking of Modals

YING ‘should’ and DANG ‘should; will’, as two modals, can collocate with each other, either as 應當 *yīng-dāng* ‘should’ or as 當應 *dāng-yīng* ‘should’, the occurrence of which counts twelve and eleven, respectively. Despite the almost equal distribution of the two complex modal verbs, they exhibit crucial semantic differences. In particular, *yīng-dāng* ‘should’, on a par with YING ‘should’, expresses the deontic meanings of necessity and obligation, as illustrated from (29) to (30).

- (29) 眾中有臣言：「沙門釋子皆作此事，盡應當殺。」 (*sifēn lǚ, taishō* 22, 1468, 593c)

zhòng zhōng yǒu chén yán shāmén shì zǐ jiē zuò cǐ shì,  
people in have official say monastics Sakyan son all do  
this thing

jìn yīng dāng shā.  
all should should kill

*An official among the audience said: the monastics under the tutelage of Sakynmuni all do this, thus they should all be killed.*

- (30) 今故應當更請眾僧供給藥。 (*sifēn lǚ, taishō* 22, 1468, 668c)

jīn gù yīng dāng gēng qǐng zhòng sēng gōnggěi yào.

today so should should again ask all sangha offer medicine

*Thus, (I) shall once again request the sangha members to accept my medical offerings.*

- (31) 僧即應當還彼衣... (*sifēn lǚ, taishō* 22, 1468, 733b)

sēng jí yīng dāng huán bǐ yī...

monastics then should should return he clothes

*Monastics should return the clothes right away.*

*dāng-yīng* ‘should’, on the other hand, patterns more with DANG ‘should; will’ with regard to the syntactic contexts. Specifically, *dāng-yīng* ‘should’ occurs either in interrogative or in conditional contexts.

- (32) 若比丘，作尼師壇當應量作。 (*sifēn lǚ, taishō* 22, 1468, 694b)

ruò bǐqiū, zuò nīshītán dāng yīng liáng zuò.

if bhikkhu make Niśīdana should should measure make

*If it comes to a Bhikkhu, he should measure himself before making Niśīdana.*

- (33) 諸比丘尼作如是念：「我等亦當應誦法毘尼不？」佛言：「應誦。」

zhū bǐqiūní zuò rúshì niàn:

\_\_ wǒ děng yì dāng yīng sòng fǎ

PL Bhikkhuni make thus think I PL also should should  
recite Dhammar

píní fǒu? fó yán: \_\_ yīng sòng.

Vinaya interrogation Buddha say should recite

*The Bhikkhunis asked thus: “Shall we also recite Dharma and Vinaya?” The Buddha answered: “(You) should recite (them).”* (*sifēn lǚ, taishō* 22, 1468, 926c)



In fact, DANG ‘should; will’ is attested to occur in conditional contexts, as shown in (34) and (35). Moreover, the occurrence of (35) counts 441 times, which account for 17.88% of all the occurrences of DANG ‘should; will’ in the *Dharmagupta-Vinaya*.

- (34) 世尊告言：「今不應作如是報我，若實當言實，若不實當言不實。」  
 shìzūn gào yán: jīn bù yīng zuò rúshì bào wǒ,  
 ruò shí dāng yán shí,  
 Buddha say word now NEG should do thus reply me if real should say real  
 ruò bù shí dāng yán bù shí.  
 if not real should say not real  
 The Buddha said: you should not reply me this way. If it is real, you should say that it is real; if it is not real, you should say that it is not real. (*sifēn lù, taishō* 22, 1468, 588a)
- (35) 欲說戒者當如是說... (*sifēn lù, taishō* 22, 1468, 570b (and more))  
 yù shuō jiè zhě dāng rúshì shuō...  
 want preach precept person should thus speak...  
 ‘Those who want to preach precepts should speak as such...’

#### 8.4.4 Wh-adverbial with Modals

The typical *wh*-adverbial 云何 *yúnhé* ‘how’ can be utilized to distinguish different types of modals, as shown in Sect. 3.3. In the *Dharmagupta-Vinaya*, the collocation between *yúnhé* ‘how’ and YING ‘should’ is not attested, regardless of the word order. On the other hand, *yúnhé* ‘how’ precedes DANG ‘should; will’ twice and follows DANG ‘should; will’ as many as 99 times in the same texts. 云何當 *yúnhé-dāng* ‘how-should’, as exemplified in (36), is most likely to be interpreted as a rhetorical question. Pragmatically, the speaker intends to refute the proposal made by the interlocuter(s).

- (36) 我已請佛及僧止宿我園，云何當捨？(*sifēn lù, taishō* 22, 1468, 855c)  
 wǒ yǐ qǐng fó jí sēng zhǐsù wǒ yuán, yúnhé dāng shè?  
 I already invite Buddha and sangha abide I land how  
 should abandon  
 I’ve already invited the Buddha and the sangha to abide in my land. How shall I give up the invitation?

When it comes to *dāng-yúnhé* ‘should-how’, it usually functions as a genuine question regarding the manner of an action, as illustrated from (37) to (39).

- (37) ...遣人大送種種好衣與諸比丘，諸比丘不知當云何？往白佛，佛言：「聽分。」  
 ...qiǎn rén dà sòng zhǒng zhǒng hǎo yī yǔ zhū bǐqiū,  
 send people big offer kind kind good robe to PL Bhikkhu PL Bhikkhu  
 zhū bǐqiū bù zhī dāng yúnhé? wǎng bái fó, fó yán:  
 tīng fēn.

not\_know\_should\_how\_go\_say\_Buddha\_Buddha\_say\_allow\_distribute

... (They) send people to generously offer several kinds of quality robes to Bhikkhus, and the Bhikkhus don't know how to do. (They) go to consult the Buddha and the Buddha replied: "(I) allow (you) to distribute (the robes)". (sifen lü, taishō 22, 1468, 855a)

- (38) 我當云何? (sifēn lǜ, taishō 22, 1468, 570a, very frequent)

wǒ\_dāng\_yúnhé?

I\_should\_how

What shall I do?

- (39) 我念言:『當云何得水澆此衣?』 (sifēn lǜ, taishō 22, 1468, 795a)

wǒ\_niàn\_yán:dāng\_yúnhé\_dé\_shuǐ\_huàn\_cǐ\_yī?

I\_think\_say\_should\_how\_obtain\_water\_wash\_this\_robe

I thought: "How shall I get water to wash the robe?"

It is interesting to note that a question can end with *dāng-yúnhé* 'should-how', with the interpretation of an action being context-dependent, as shown in (37) and (38). Alternatively, an action can also be explicitly expressed by following *dāng-yúnhé* 'should-how', as illustrated in (39). This distributional contrast is displayed in Table 8.2. Another point to mention is that *dāng-yúnhé* 'should-how' is predominantly collocated with first subject pronouns, be they singular, plural or even implicit. This feature is captured in Table 8.3.

**Table 8.2** 當云何 *dāng-yúnhé* 'should-how' as (part of) predicates

	Predicate	Counts	Percentage (%)
<i>Dāng yúnhé</i> (99 counts)	<i>dāng yúnhé</i>	93	93.94
	<i>dāng yúnhé</i> +VP	6	6.06

**Table 8.3** 當云何 *dāng-yúnhé* 'should-how' and its subjects

	Subject	Counts	Percentage
<i>Dāng yúnhé</i> (99 counts)	First person pronouns	90	90.90
	Others	9	9.09

### 8.4.5 Types of Modality

The above facts indicate that YING ‘should’ and DANG ‘should; will’, albeit being similar in some cases, should be clearly distinguished. Crucially, YING ‘should’ is taken as a deontic modal verb which carries the meanings of order, obligation and request, which are most directly related to the establishment of precepts. Both the affirmative and negative forms are attested in the *Dharmagupta-Vinaya*, and they are utilized to describe what should be obeyed and what should be avoided as monastic rules, respectively. On the other hand, DANG ‘should; will’ carries dual functions, either as a deontic modal or as an epistemic modal. For instance, the two occurrences of DANG ‘should; will’ in (24) feature a deontic usage, encoding suggestions from the Buddha. However, the non-obedience of suggestions may not constitute transgression of precepts. Example (24) is also a case in point, as it exemplifies the differences between precepts and suggestions expressed by YING ‘should’ and DANG ‘should; will’, respectively. Furthermore, it is DANG ‘should; will’, but not YING ‘should’, which is attested to function as an epistemic modal or even a future marker in the *Dharmagupta-Vinaya*. The relevant examples of epistemic DANG ‘should; will’ are presented from (40) to (42), in which the speaker’s judgement or prediction is expressed. In (40), DANG ‘should; will’ encodes the speaker’s judgement of the likelihood of a proposition, i.e., the Buddha knows the situation. In (41) and (42), however, the speaker’s predication is expressed. A predication is usually related to a future situation or event. Thus, it does not come as a surprise that predictive and future meanings usually converge, as shown in (41) and (42).

- (40) 時尊者沓婆摩羅子去佛不遠，世尊知而故問：「汝聞此比丘尼所說不？」  
 答言：「聞！唯世尊當知之。」 (sifēn lǚ, taishō 22, 1468, 588a)  
 shí\_zūnzhě\_tàpómóluózi\_qù\_fó\_bù\_yuǎn,\_shìzūn\_zhī\_ér  
 then\_venerable\_Dravya-malla-putra\_away\_Buddha\_not\_far\_  
 Buddha\_know\_but\_  
 gù\_wèn:\_rǔ\_wén\_cǐ\_bīqiūní\_suǒ\_shuō\_fǒu?\_dá\_yán\_wén!  
 Intentionally\_ask\_you\_hear\_this\_Bhikkhuni\_SUO\_speak\_  
 interrogation\_answer\_say\_hear  
 wéi\_shìzūn\_dāng\_zhī\_zhī  
 only\_Buddha\_must\_know\_it  
 ‘At the time when Venerable Dravya-malla-putra was not far away from the Buddha, the Buddha intentionally raised the question: “Do you hear what the bhikkhuni said?” The reply goes: “Yes. Bhante, you must have known that.’
- (41) 佛問阿難：「迦葉何時當還？」阿難白佛言：「却後十日當還。」 (sifēn lǚ, taishō 22, 1468, 601c)  
 fó\_wèn\_ā'nán:\_jiāshè\_hé\_shí\_dāng\_huán?\_ā'nán\_bái\_fó\_yán:  
 Buddha\_ask\_Ananda\_Kassapa\_which\_time\_should\_return\_  
 Ananda\_speak\_Buddha\_say  
 què\_hòu\_shí\_rì\_dāng\_huán  
 after\_ten\_day\_should\_return

*The Buddha asked Ananda: “When is Kassapa supposed to be back?”*

*Ananda replied: “Kassapa is supposed to return in ten days.”*

(42) 婆羅門占相言：「此少壯夫人當生子，而是王怨。」

pólómén zhānxiāng yán: cǐ shǎozhuàng fūrén dāng shēng zǐ,  
Brahma predicate say this young wife should give birth son  
ér shì wáng yuàn

however be king enemy

*The brahma predicted that it is this young wife that will give birth to a son,  
who will however be the king’s enemy. (sifēn lǚ, taishō 22, 1468, 591c)*

## 8.5 Conclusion

The syntactic analysis of DANG and YING provides some evidence for their analysis as fully developed deontic markers in Early Middle Chinese. DANG additionally obtains a future reading and an epistemic reading, which are both generated in CP/TP, similar to the modal reading. The size of the complement of DANG and YING can be larger than vP, i.e. the size of the complement of the possibility verbs of LAC. This provides additional evidence for their being generated in a higher syntactic layer than the possibility modals. The latter are generated in the lexical layer in LAC and move up to the CP/TP layer only under particular syntactic constraints, i.e. in combination with negation or in rhetorical questions. The scope of negation with regard to necessity modals can be employed in order to analyse their syntactic position. In addition, in this paper it has been shown that the position of adverbial *wh*-pronouns can provide some purely syntactic evidence for their generation in the TP layer. All complement clauses are non-finite according to the scope of the SFPs 也 yě, but particularly according to the scope of 矣 yǐ.

The analysis of the *Dharmagupta-Vinaya* confirms the range of modal uses of YING and DANG in a prescriptive text, but it also displays the subtle syntactic and semantic differences between the two modals. These are connected to the fact that YING ‘should’ is more likely to refer to precepts, any transgression of which would incur punishment of varying degrees. By contrast, DANG ‘should; will’ is inclined to express suggestions rather than precepts. This fact certainly accounts for its particular ability to develop into an epistemic and a future marker; this is a feature, which distinguishes it clearly from YING.

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