

A syntactic approach to the grammaticalization of the modal marker *dāng* 當 in Middle Chinese

In this paper, I discuss the grammaticalization of the Chinese modal verb *dāng* from a lexical verb into a deontic modal marker and a future marker as a case of upward movement to one or more functional categories in the sense of Roberts and Roussou (2003). Evidence for a functional category outside *vP* hosting deontic modality comes from the deontic negative markers of Archaic Chinese, from the semantic scope of negation (following Cormack and Smith 2002), and from the relative order of necessity modals and possibility modals.

Modal markers in Chinese are a clear instantiation of grammaticalization. They derive from lexical verbs and grammaticalize into markers of deontic and/or epistemic modality, and/or into future markers. In order to account for the poly-functionality of most modals in Modern Chinese, Tsai (e.g. 2015) (based on Rizzi 1997) proposes that they can be derived in different syntactic positions: CP=epistemic modality; TP(IP)=deontic modality; *vP*=dynamic/circumstantial modality. In Late Archaic Chinese (LAC) (5th–3rd c. BCE), modal verbs are almost exclusively confined to possibility verbs, i.e. to dynamic modality. Deontic modality (prohibition) in LAC is expressed by a class of deontic negative markers (see ex. (1)), deontic obligation is expressed by the possibility modal KE with double negation ‘NEG+KE+NEG cannot not = have to’; Chinese does not have negative concord. The second clause of example (1) contains the deontic negative marker *wù*, which is followed by a high modal particle; this argues for a position of the deontic negative marker outside *vP*, and accordingly for a functional projection hosting deontic modality above *vP*.

(1) 不如聽之以卒秦，勿庸稱也以為天下。 (Zhangguo ce 11.10.2, 2nd c. BCE)

Bù rú tīng zhī yǐ zú Qín, wù yōng chēng yě yǐwéi tiānxià
NEG be.like listen 3OBJ CON finish Qin, NEG_{mod} MOD mention NOM make empire

‘It would be better to listen to them and let Qin succeed, but it should not be announced and made to [an affair of] the empire.’

Deontic readings of the possibility modals of LAC first appear triggered by negation or in rhetorical questions. The deontic and the possibility readings of NEG+MOD_{POSS} are distinguishable by the semantic scope of negation. Since the semantic scope is not reflected by the syntactic position of NEG, this only provides indirect evidence for the realization of possibility modals in two different syntactic positions as Modal₁ and Modal₂ in LAC and Early Middle Chinese (EMC) (2nd c. BCE–2nd c. CE). The argumentation follows a proposal made in Cormack and Smith (2002), who introduce a functional head Pol(arity) to distinguish between Modal₁ and Modal₂, see example (2). In (2a) KE is analyzed as Modal₂, it can be paraphrased by NOT[POSSIBLE; in (2b) it belongs to Modal₁, paraphrased by NECESSARY[NOT. The complement of KE in (2a) refers to a resultant state; resultant states can be marked by derivational affixation in Archaic Chinese, similar to the Tibetan aspectual system (Jin Lixin 2006, Meisterernst 2016).

(2) a. 「終不可就，已而棄之。」 (EMC: *Shiji*: 112; 2961, 100 BCE)

zhōng bù kě jiù, yǐ ér qì zhī
finally NEG can finish, then abandon OBJ

‘... when eventually it could not be finished, they gave it up.’

b. 臣聞敗軍之將，不可以言勇， (EMC: *Shiji*:92;2617)

chén wén bài jūn zhī jiàng, bù kě yǐ yán yǒng,
subject hear defeat army GEN general, NEG can YI speak bravery,

‘I have heard that the general of a defeated army **may not** speak about bravery ...’

The modal DANG ‘should’ at issue in this discussion first emerges as a modal auxiliary at the end of the LAC (Meisterernst 2011) period. The emergence of new modal markers in Early Middle Chinese has been connected to the loss of the reconstructed former derivational aspectual morphology (Meisterernst 2017), as one of a number of structural changes connected to

the loss of transparency of the derivational morphology of Old Chinese (Aldridge, e.g. 2013, Feng Shengli 2015, Meisterernst 2017).

DANG grammaticalizes from a lexical verb ‘undertake, act as, match correspond to’ into a modal auxiliary ‘ought, should’. It expresses first circumstantial and later weak deontic modality independently from negation or the context of rhetorical questions; in EMC it also functions as a future marker. In (3a) DANG appears as a lexical verb, in (3b) as a deontic modal with an unaccusative telic verb as complement, and in (3c) as a future marker.

(3) a. 行爵出祿。必當其位 (Liji, Yuèlìng 月令)

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 (Shiji 史記 31,1463)

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. 我所說經典無量千萬億，已說、今說、當說，而於其中

wǒ suǒ shuō jīngdiǎn wú liàng qiān wàn yì, yǐ shuō, jīn shuō, dāng shuō, ér yú qí zhōng

I REL tell classic scripture not-have measure

qiān wàn yì, yǐ shuō,

thousand ten-thousand hundred thousand, already tell,

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, ...’ (Taisho, 9, no.262, p.31b, 5th c. CE)

Although DANG as a necessity operator scopes over negation, the negation marker always precedes DANG. But purely syntactic evidence for the high position of DANG comes from the fact that it always precedes possibility modals when they appear in combination as in ex. (3) with the possibility modal *dé* ‘can’. The reverse order POSSIBILITY > NECESSITY is not attested, unless DANG is a lexical verb and not a modal marker.

(4) 宜以時廢退，不當得居位。 (Hanshu 75:3182, EMC)

Yí yǐ shí fèi tuì, bù dāng dé jū wèi

Appropriate PREP time discard repress, NEG DANG can dwell position

‘They should be timely discarded and repressed, and they should not be able to remain in position.’

The upward movement of DANG to the TP layer is the condition for its development into a future marker. In this position, DANG could be reanalyzed as a future marker, similar to the future marker *jiāng* 將 of LAC, which appears outside vP in the TP layer (Meisterernst 2015).

(5) 來年秦復求割地，王將與之乎？ (Shiji: 76; 2373, EMC)

Lái nián Qín fù qiú gē dì, wáng jiāng yǔ zhī hū

Come year Qin again demand cut.off territory, king FUT give OBJ FIN

‘Next year, if Qin again demands that you cut off some territory, will you then give it to them?’

References:

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