The diachronic development of future markers in Chinese

Linguistic analyses of future marking distinguish two different viewpoints: 1) an objectivistic view, i.e., the *branching future* concept, according to which the future is a kind of modality (Portner 2009: 236), and 2) a subjective perspective, in which future tense simply refers to a time following speech time (Reichenbach 1947, Bochnak 2019). Within the cartographic approach, future tense is hosted in a functional projection separate from the projections hosting different kinds of modality.

(1) $ModP_{epist} > TP(Past) > TP(fut) > AspP_{habit} > ModP_{volition} > AspP... > ModP_{obligation} > ModP_{permission/ability}$ (modified from Cinque 2004)

Chinese does not have morphological tense marking; temporal and aspectual distinctions are expressed analytically. However, future is the most regularly expressed temporal (and/or aspectual) concept in Archaic Chinese. Future markers by default appear in complementary distribution with other aspecto-temporal markers, and in Archaic Chinese they permit a purely temporal reading. This is shown in example (2) with the future marker *jiāng*, which is semantically similar to the Pre- and Early Archaic future marker *qí* 其, frequently appearing in oracular predictions (Djamouri 2009).

(2) 公　　將　　以　某　　　　日　　薨　(*Lüshi chunqiu* LAC/EMC)
　　　gōng　jiāng　yǐ　mǒu　　　rì　　hōng
　　　duke　FUT　YI　such.and.such day　　pass.away
　　　'The duke will pass away on such-and-such day.'

In Early Middle Chinese, new future markers grammaticalize from the lexical verbs *dāng* 當 'correspond to', which first develops into a deontic auxiliary 'should', and from the volitional verb *yù* 欲. Both markers include modal, besides their temporal readings. Similar to *jiāng*, they appear in complementary distribution with other aspecto-temporal markers in the TP layer. When they appear in combination with future *jiāng*, DANG and YU either have to be analyzed as pre-modal verbs, or the combination functions as a disyllabic future marker.

(3) a.　若干　　　百　年　　　當　　至　　　于闐　國。
　　　　Ruògān　bǎi　nián　dāng　zhì　　yútiàn　guó
　　　　Several　hundred　year DANG　arrive　Khotan state
　　　　'After several hundred years it will/should arrive in Khotan.'

　　b.　『欲云何作？』
　　　　yù　　yúhé zuò
　　　　YU　how do
　　　　'How will you (do you want to) do it?'

The only syntactic difference between EMC future DANG and YU, and LAC *jiāng* is the position of negation. Since DANG and YU are verbal heads, NEG has to precede them, but it has to follow the aspecto-temporal adverb *jiāng*. Meisterernst (2020) proposed two different functional projections hosting future tense and deontic modality for LAC and EMC. Contrastingly, we propose one unified zone within TP (following Ramchand and Svenonius 2014), which can be targeted by either a root modal necessity marker or a by future marker; epistemic necessity is hosted in a higher projection. In LAC, this zone could be occupied by either a modal negator or a future marker; modal verbs were confined to the lexical, i.e., the *v*P layer. The situation changes in EMC, when true deontic modals emerged, which were hosted in the TP layer in the same zone as modal negators and future markers in LAC.

(4) $[_{CP}\ ModP_{epist}\ [_{TP}\ TP\textit{zone}\ FUT/ASP/NEG_{Mod}/MOD_{deont}\ [_{vP}\ VP\textit{zone}\ (MOD_{circum})\ vP]]]$

Similar to what Ramchand and Svenonius propose, the markers in the *v*P external zone are characterized by a relative independence of the aktionsart feature of the *v*P.

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