Optional, obligatory, and forbidden modal subordination: Notes on the typology of futures

The English future forms *will* and *be going to/gonna* contrast in their use in offering contexts and warnings, as has been much discussed (Binnick 1971, Copley 2002, Klecha 2011, Matthewson et al. 2022, i.a.). In offers, *will* but not *going to* is appropriate. In warnings, *will* warns about an outcome contingent on some factor, e.g. action by the addressee, whereas warnings about inevitabilities require *going to*.

(1) A: I'm bored. B: I'll bring cards! (offer) / I'm going to bring cards! (#offer)

(2) a. Don't go near that bomb! It'll explode! *(Conditional warning, Binnick 1971, Klecha 2011)*
b. Don't go near that bomb! It's going to explode! *(Inevitable warning,* ibid.*)*

Similar contrasts have been noted in languages including Indonesian & Turkish (Copley 2002), St'at'imcets (Glougie 2007), Gitksan (Matthewson et al. 2022), and Siamou (Toews 2015). Previous literature has typically accounted for these contrasts by appeal to an aspectual operator (e.g. PROG) that outscopes the future element in *going to*-like futures. In this paper, while recognizing that such a structure is appropriate for some languages (English, Gitksan), we argue that offering/warning contrasts cannot always reflect aspectual differences. Instead, building on Klecha (2011), we argue that the more general factor determining appropriateness in offers and warnings relates to the ability of future modals to undergo modal subordination (MS). We identify three classes of future modals across languages: MS-obligatory, MS-optional, and MS-forbidden. MS-obligatory futures are clearly conditional in warnings: in all accessible futures *where a salient condition is met*, p holds. (This is Klecha's analysis of *will*.) In offering contexts, an antecedent *if you want* can be accommodated (Matthewson et al. 2022); MS-obligatory futures thus make good offers. MS-forbidden futures as warnings warn about inevitable outcomes: in all accessible futures, p holds. Because they cannot allow an accommodated *if you want*, they are inappropriate as offers. Last, MS-optional futures can express warnings about either contingent or inevitable outcomes. (This is Klecha's analysis of *going to*.) Such futures should be acceptable in offers, as they permit an accommodated *if you want*; however, in competition with MS-obligatory futures, which more clearly communicate that a condition has been accommodated, they may be dispreferred here (as in (1)).

Languages and data. We discuss the behavior of offers and warnings in Marathi (Indo-Aryan; native speaker author), Mandarin (native speaker authors), and Northern Tujia (Tibeto-Burman; fieldwork), with some additional data from Amharic (Semitic; fieldwork). In Marathi and Mandarin, one future is MS-obligatory and one is MS-forbidden. See (3) for Marathi *-el* +allomorphs (MS-obligatory) vs. *ɳar* + copula (MS-forbidden), and (4) for Mandarin *hui* (MS-obligatory) vs. *yao* (MS-forbidden).

(3) Marathi

a. mi pətte aɳ-**{in / #ɳar ah-e}** *Offering*
1SG cards bring-EL / #NAR COP.PRES-SG
'I'll bring cards.'

b. ghər-at dzau nəko, bomb phuʈ-**{el / #ɳar ah-e}**! *Cond. warning*
house-LOC go.NONFIN NEG.IMPER bomb explode-EL #NAR COP.PRES-SG
'Don't go in the house, the bomb will explode!'

c. ghər-at dzau nəko, bomb phuʈ-**{ɳar ah-e / #el}**! *Inev. warning*
house-LOC go.NONFIN NEG.IMPER bomb explode-NAR COP.PRES-SG / #EL
'Don't go in the house, the bomb is going to explode!'

(4) Mandarin

a. wo **{hui/#yao}** dai dangao lai *Offering*
1SG HUI/#YAO bring cake come
'I will bring cake.'

b. bie kaojin men! zhadan **{hui/#yao}** baozha *Cond. warning*
NEG.IMP go.near door bomb HUI/#YAO explode
'Don't go near the door! The bomb will explode.'

c. bie kaojin men! zhadan **{yao/#hui}** baozha *Inev. warning*
NEG.IMP go.near door bomb YAO/#HUI explode
'Don't go near the door! The bomb is going to explode.'

Northern Tujia shows a different pattern: one future (*i*^{24}) is MS-optional, one future (*xʊ*^{44}) is MS-forbidden. As expected, in the absence of a MS-obligatory competitor, the MS-optional future can be used in offering; it can also be used in warnings of either type.

(5) Northern Tujia

a. ŋa^{24} ni^{44} po^{21} tʰʊ^{24} **{i^{24}/#xʊ^{44}}** *Offering*
1SG 2SG for pour.water I/#XU
'I will bring water for you.'

b. kai^{24} tsʰʊo^{44} tʰa^{44} tɕʰie^{44} li^{21}! lui^{24}kʊan^{21} paʊ^{24}tsa^{21} **{i^{24}/#xʊ^{44}}** *Cond. warning*
DEM house NEG.IMP enter DIR detonator explode I/#XU
'Don't go into the house! The bomb will explode.'

c. kai^{24} tsʰʊo^{44} tʰa^{44} tɕʰie^{44} li^{21}! lui^{24}kʊan^{21} paʊ^{24}tsa^{21} **{i^{24}/xʊ^{44}}** *Inev. warning*
DEM house NEG.IMP enter DIR detonator explode I/XU
'Don't go into the house! The bomb is going to explode.'

For Amharic, while our data are not complete, we find that one future form (the imperfective) is provided in elicitation for offers and conditional warnings, but the other (*li*) is provided for inevitable warnings and rejected for offers. Such a system could be English-type (MS-optional vs. MS-obligatory), Marathi/Mandarin-type (MS-obligatory vs. MS-forbidden), or Northern Tujia-type (MS-optional vs. MS-forbidden). To summarize the English, Marathi (Mar), Mandarin (Man), and Northern Tujia data:

MS is...	**Offer**	**Cond. warning**	**Inev. warning**	**Eng**	**Mar**	**Man**	**N.Tujia**
Optional	✓	✓	✓	*going to*	-	-	*i*^{24}
Obligatory	✓	✓	✗	*will*	*-el*	*hui*	-
Forbidden	✗	✗	✓	-	*ŋar*	*yao*	*xʊ*^{44}

Our findings represent the full range of possibilities to be expected if, as Klecha (2011) argues, susceptibility to MS is a matter of lexical idiosyncrasy: some futures allow it, some reject it, and some require it, simply as a matter of the particular presuppositions in the lexical entry of that future element.

Against a uniformly aspectual analysis. Copley (2002) and Matthewson et al. (2022) argue that the distinctive behaviors for offering/warning of English *going to* and its Gitksan counterpart derive from the presence of an aspectual operator PROG. At least Northern Tujia, Mandarin, and Amharic (and Siamou; see Toews 2015: §7.4.1) do not appear to construct their future expressions in this way. Instead, even where overt expressions of progressive/imperfective aspect exist in the language, they are absent in the types of futures that disallow offers and conditional warnings. In Amharic, the imperfective stem form used for events in progress is found in the *will*-like future (used for offers and conditional warnings), not the *going to*-like future (used for inevitable warnings but not offers)—the opposite of the English pattern. Northern Tujia has an imperfective aspect marker *la*^{44}, which is not part of either future form. Mandarin has a progressive aspect marker *zai* which likewise does not appear in future sentences unless they describe events in progress in the future, as in (6). (This reading suggests that the future can scope over the progressive in Mandarin, but not under it, as on Copley's analysis.)

(6) wo mingtian wudian **hui zai** da wangqiu Mandarin
1SG tomorrow five.o'clock HUI PROG play tennis
'I will be playing tennis tomorrow at five.'

In our sample, Marathi alone perhaps includes progressive/imperfective in one future (*-ŋar* + COP). Although this form lacks the language's usual imperfective morphology, *-ŋar* also occurs in strictly imperfective participial relative clauses. Semantically, unlike Mandarin *yao*, *-ŋar* cannot be used to express a totally spur-of-the-moment decision. In English, someone who just won a free trip to a location of their choice might say *Aha, I'll go to Japan!*. Uttering *Aha, I'm going to go to Japan!* suggests (at least momentary) planning. This follows if *going to* consists of PROG + PROSP (Matthewson et al. 2022), requiring a prestate to be in progress at TT. A true spur-of-the-moment decision context lacks such a prestate. By this logic, the infelicity of Marathi *-ŋar* here could suggest a covert PROG. If so, we propose that this is the modal element that is MS-forbidden in *-ŋar* futures.

References

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