Conjectural Modal in Khalkha Mongolian

Introduction. The goal of the paper is to give a unified semantic analysis of the conjectural modal *daa* in Khalkha Mongolian that accounts for its distributions in declaratives (1), interrogatives (2), and imperatives (3). In declaratives, *daa* weakens speaker commitment; in interrogatives, it marks conjectural questions (CQs); and in imperatives, it weakens the imperative.

(1) Boroo or-son bai-na daa.
rain come-PST be-NPST DAA
'It has rained, I assume.'

(2) Naraa tom bolood yu hii-ne dee?
Naraa big become what do-NPST DAA
'I wonder what Naraa will do when she grows up?'

(3) Hel dee!
say DAA
'(Please) Say it!'

The distribution of *daa*. When compared with plain assertions, declaratives with *daa* weaken the commitment of the speaker to the proposition. This meaning is not-at issue since it scopes over negation (4).

(4) Bold ger-t-ee ireed kino { ül üz-ne, üze-h-güi} dee.
Bold home-DAT-RP come movie NEG watch-NPST watch-INF-NEG DAA
= 'Bold will not watch a movie when he gets home, I assume.'
≠ 'I don't assume that Bold will watch a movie.'

I note that *daa* is felicitous in the contexts where the speaker has inferential evidence (e.g., seeing wet ground in (1)) but is infelicitous with direct or reportative evidential contexts (5)–(6). From this, one might suggest that *daa* patterns with inferential evidentials. Furthermore, many languages use evidential markers to indicate CQs, such as Gitksan, St'át'imcets and Nłeʔkepmxcín (Littell et al., 2010), Italian (Eckardt & Beltrama, 2019), and German (Eckardt, 2020).

(5) *Context: you saw that Ochir finished his food.*
#Ochir hool-oo id-sen dee.
Ochir food-RP eat-PST DAA
'Ochir ate his food, I assume.'

(6) *Context: Ochir's mom told you that he ate his food.*
Ochir hool-oo id-sen dee.
Ochir food-RP eat-PST DAA
'Ochir ate his food, I assume.'

However, since *daa* is also felicitous in contexts where the speaker has no evidence (7), I will not analyze *daa* as an evidential.

(7) *Context: you have a feeling that your friend Bold is going to visit you today. You haven't heard from him in a while and have no reason to assume that he will visit.*
Bold manaid önöödör ir-ne dee.
Bold mine today come-NPST DAA
'Bold will come to my place today, I assume.'

To account for the aforementioned properties of *daa*, I adopt a modal analysis for *daa*. However, *daa* does not pattern like a universal epistemic modal (8), an epistemic possibility modal (9), or a weak necessity modal (10).

(8) *Context: Bold is at the doctor, who has reviewed her test results. He asked his doctor what is wrong with him. The doctor replies:*
#Hort havdar bai-na daa.
toxic tumor be-NPST DAA
Int.: 'It must be cancer.'

(9) #Odoo 5 bol-j bai-na. Ter gert-ee bai-na daa, elvel ajil deer-ee baina daa.
Now 5 be-IMPRF be-NPTS. She home-RP be-NPST DAA, or work on-RP be-NPST DAA
Int.: 'It's 5 o'clock. She is at home *daa* or is at work *daa*.'

(10) #Bi üh-sen/ne dee gevch bi ühee-güi bai-na.
I die-PST/PRES DAA but I die-NEG be-PRES
‘ Int.: I should be dead but I am not.

So far, *daa* appears consistent with the Italian presumptive future *sarà* (Ippolito & Farkas, 2022). However, unlike *sarà, daa* cannot occur in high likelihood contexts (11).

(11) *Context: one black ball and nine white balls in a box. You are requested to draw a ball from the box without seeing the color.*
#Bi tsagaan bömbög av-san daa.
I white ball take-PST DAA
Int.: ‘I have probably drawn the white ball’.

Analysis. I propose a conjectural modal analysis of *daa* that adapts Ippolito & Farkas’s (2022) analysis, with *daa* introducing an additional presupposition about the agent’s commitment (12).

(12) $[\![daa(S)_F]\!]^{g,w,t,c}$ is defined iff
a. $[\![S_F]\!]^{g,w,t,c} \in C$ and there is a $q \in C$ s.t. $\forall r$: $r \in C$ and $r \neq q$, $q >_{i,t,Di,w} r$;
b. $\text{COMMIT}_{i,t,Di.w}(q) < \theta(S)$.
If defined, $[\![PF(S)_F]\!]^{g,w,t,c} = 1$ iff $[\![S_F]\!]$ = the q.

In (12), (i) i is a contextually bound variable whose value is the speaker in declaratives and imperatives, and addressee in interrogatives. (ii) *Di* is either the doxastic or the deontic modal base (MB), depending on the clause type: doxastic in declaratives and interrogatives, and deontic in imperatives. (iii) $\text{COMMIT}_{i,t,Di.w}$ is i’s commitment to the proposition, determined by the MB: it is evidence-based when the MB is doxastic, and authority-based when the MB is deontic. (iv) $\theta(S)$ is the default commitment requirement of the sentence S.

Under this analysis, when a speaker uses a declarative with *daa (S)*, where *S* denotes a proposition *p*, *daa (S)* presupposes that there is proposition *q* in C that is highest-ranked, but the evidential requirement supporting *q* is lower than the default requirement for declaratives. It then asserts that *p* is equivalent to *q*. In other words, *p* is represented as the best possible alternative given the speaker’s limited evidence, yielding a conjecture interpretation.

In interrogatives, *daa* marks CQs. Assuming that CQs are semantically questions, I adopt a Hamblin-style approach to CQs (Hamblin, 1973). Following Guerzoni (2003) and Littell et al. (2010), the presupposition introduced by a question is the conjunction of the presuppositions introduced by the statements in its Hamblin set. Thus, the conjectural meaning arises from the semantics of *daa*, as shown in (13).

(13)) [[*daa* (Naraa tom bolood yu hiine)]] = {‘Naraa is going to be a dancer *daa*’, ‘Naraa is going to be a singer *daa*, …} = {‘Naraa is going to be a dancer [presupposes that this is the highest ranked alternative, but the agent’s evidence falls below the threshold]’, ‘Naraa is going to be a singer [presupposes that this is the highest ranked alternative, but the agent’s evidence falls below the threshold], …}

Here, the speaker knows that any possible answer to the question carries the presupposition that the addressee lacks sufficient evidence to support the answer, and thus cannot resolve the QUD.

Lastly, *daa* weakens imperatives. I adopt a modal account for imperatives (Portner, 2007; Kaufmann, 2012). The weakening effect follows from the semantics of *daa(S)* in (12): *daa(S)* presupposes that, among all the alternatives, there is a highest ranked action that the addressee should perform, but the obligation to perform falls below the default requirement for imperatives. This yields a weak imperative interpretation with *daa*.

Conclusion. This paper presents a modal analysis of *daa* that accounts for its weakening effect in declaratives, interrogatives, and imperatives.

References

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