Liberalism and Bouletic/Deontic Modality

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1 Decision Maker in Bouletic Modality

The state of *wanting something* reflects personal preference and involves personal decision making. In that sense, wanting act follows the Condition of Liberalism. The condition of Liberalism is that, no matter how other people oppose, personal decisions can be made on certain matters. In actuality, what we want may not come out due to restrictions, but wanting something is a liberal act.

To put things in the possible world semantics, in the best possible worlds for a decision maker, her wants are fulfilled. Her want worlds are the subset of the worlds where her wants are fulfilled. The meaning of the sentence (1a) is expressed as in (1b) which says that, in all the accessible world which accords with Mary's wants at world w_c, she watches a movie.

(1) a. Mary wants to watch a movie.

b. $\forall w.[BOUL_m(w)(w_c) \rightarrow$ watch-a-movie(m,w)]

(m: Mary, w: world, w_c: actual world, $BOUL_x$: bouletic accessibility relation of the individual x)

From the perspective of decision making, the wanter is the only person involved with the wishes. If the speaker *I* is the agent of wanting to watch a movie, the speaker is the single decision maker regarding her preference, as shown in (2). If the first person plural subject *we* wants something unanimously, the group members including the speaker are the decision makers as in (3).

(2) a. I want to watch a movie (Others do not want to).

b. decision maker = {I}

(3) a. We want to watch a movie.

b. decision maker = {I, group member}

Even though others may want something contrary to the wanter, the wanter's desire remains unaffected, as in (4).

(4) a. Dee wants to wear blue even though you want her to wear yellow.

b. decision maker = {Dee}

2 Decision Maker in Deontic Modality

In contrast, the decision maker of deontic modals such as *must, should*, and *ought to* differs from the attitude holder. Traffic laws are imposed on public by the lawmakers: therefore, the decision makers are not drivers but a lawgiver, as shown in (5). If a teacher decides that Mary should submit a homework, the instructor is the decision maker of the deontic modal, in (6). The decision that Mary should study Spanish may be imposed due to the linguistic situation of people in Guatemala in (7).

(5) a. We should follow traffic lights.

b. decision maker = {lawmaker}

(6) a. Mary should submit her homework.

b. decision maker = {instructor}

(7) a. Mary should study Spanish. Otherwise she will not be able to communicate in Guatemala.

b. decision maker =/= Mary
= people in Guatemala

Thus, we can say that, in use of deontic modals, decision makers are someone else other than the attitude holder or the sentential subject. In case of bouletic modals, decision maker is a wanter.

3 Previous Analyses

Relevantly, van der Auwera and Plungian (1998) classify participant-internal and participant-external modality. According to them, ability modal and necessity modals are participant-internal in that the ability and necessity originates in the participants.

(8) a. Mary can make movies.

b. Mary needs to eat breakfast.

On the other hand, deontic and goal-oriented modality is participant-external. The chairperson and the teleological goal decide the possibility and necessity in (9) respectively.

(9) a. You may be seated.

b. To go to Disney Land, you should take this train.

In addition to their analysis, I would like to add that bouletic modality is participant-internal. In (10), the desire originates in the attitude holder *Mary* and the speaker respectively.

(10) a. Mary wants to play the piano.

b. I want to play the violin.

4 Incorporating Decision Makers

Now that bouletic and deontic modals depend on decision makers, the accessibility relations between possible worlds depend on decision makers. When the group preference is involved as in (12), the group members' social decision is reflected.

(11) a. Mary wants to watch a movie.

b. $\forall$w.[BOUL$_m$(w)(w$_c$) $\rightarrow$ watch-a-movie(m)(w)]

(12) a. We want to watch a movie.

b. $\forall$w.[BOUL$_{s,h}$(w)(w$_c$) $\rightarrow$ watch-a-movie(s,h)(w)]

(s: speaker, h: hearer)

(13) a. Mary should submit homework.

b. $\forall$w.[DEON$_i$(w)(w$_c$) $\rightarrow$ submit-homework(m)(w)]

The deontically and bouletically accessible worlds may differ from each other, so that following example in (14a) is not contradictory.[1]

(14) a. She ought to speak, but I do not want her to.

b. $\forall$w.[DEON$_s$(w)(w$_c$) $\rightarrow$ speak(m)(w)] $\wedge$ $\forall$w.[BOUL$_s$(w)(w$_c$) $\rightarrow$ $\neg$speak(m)(w)]

Such incorporation of modal judges may be reminiscent of Stephenson (2007)'s analysis on epistemic modality.

(15) $[\![must]\!]^{c:w,t,j}$ = [λp$_{<s,<ie,t>>}$.$\forall$w',t',x.Epist$_{w,t,j}$: p(w')(t')(x) = 1]

(Stephenson 2007, 502)

In addition to her analysis, I further claim that bouletic and deontic modals have decision makers. Moreover, the group decision is a social choice (Arrow 1963, Sen 1979, Chevaleyre et al. 2007). The social choice function SCF returns a single choice, which is going to a movie. The decision may not be unanimous but follows Pareto principle, in that when nobody has contrary preference, the mass decision agrees with individual's preferences. Also Independence of Irrelevant Alternatives is adhered because the relative ranking between going to movie and other alternatives only matter to the group decision.

(16) a. decision makers I = {s, h, p}

b. alternatives χ = {go to movie, eat out, relax at home}

c. A profile, a vector of linear orders, or preference R = (R$_s$, R$_h$, R$_p$) $\in$ L(χ)^3

d. Social Choice Function SCW(L(χ)^3) = {go to movie}

Therefore, the group desire is a result of the social choice.

[1] I thank a reviewer for bringing up this example.

References

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