Conditional Oughts in Suppositional [Inquisitive] Semantics

Aim I will present a novel semantics for deontic modals and implication that avoids Frank Jackson's [8] *conditional oughts* puzzle.

Puzzle Consider the deontic reading of (1).[1]

(1) If Abe dances, he must dance. $p \to \Box p$

Intuitively, (1) is a bit odd. Native speakers often balk at giving readings of such sentences, but when they do, they suggest a contingent statement which holds when Abe never dances unless he's obligated to do so.

Notoriously, standard accounts of deontic modals predict (1) to be a tautology. Zvolenszky [14] and Frank [7] noticed this for Kratzer semantics of modals and conditionals [11, 12, 13]. What goes wrong is that the if-clause restricts the modal base for the overt obligation in the consequent to only p worlds and the obligation $\Box p$ holds when all worlds are p worlds. If there are no p worlds, the obligation vacuously holds.

There are also counter-proposals such as assuming a covert (epistemic necessity) operator akin to Frank [7], Kaufmann and Schwager [9] and Cariani et. al [5] but Kratzer [12, pp. 106-107] convincingly argued that this is ultimately not a viable solution.

Curiously, the main alternative to the standard account of deontic modals, Andersonian deontic modals [2][2], also predicts that (1) is a tautology. The intuition behind an Andersonian account of obligation is that the information that 'must φ' conveys is that when you do not do φ, you violate your obligations. Hence, Anderson represents 'must φ' as $\neg\varphi$ implies v, where v is a designated atom which stands for the proposition that 'a violation has occurred'.

Anderson argued for using *relevant implication* but it makes no difference for the issue at hand, so we can use material implication for simplicity. Example (1) can be represented as $p \to \Box p$, which is equivalent to $p \to (\neg p \to v)$.

The problem lies in having to suppose that p and $\neg p$ hold simultaneously. (1) is only false in a world where p, $\neg p$ and v all hold, which is impossible. But it does point to a possible new solution to the puzzle.

Proposed solution I will build on the semantics for implication by Groenendijk and Roelofsen in suppositional inquisitive semantics [6] which is motivated by examples such as (2).

(2) a. If Abe dances, Bea dances.
b. If Abe dances, Bea doesn't dance.
c. Abe does not dance.

As is standard, the semantics predicts that (2-b) counts as a rejection of (2-a), but it also accounts for the intuition that uttering (2-c) dismisses both (2-a) and (2-b) because the supposition 'Abe dances' fails.

The semantics is defined for a standard propositional language to which we add Andersonian deontic modals. As the puzzle only concerns implication and deontic modals, we will omit the sources of inquisitiveness, disjunction and conjunction, entirely as it allows us to greatly simplify the semantics. Following Groenendijk and Roelofsen [6], the semantics recursively defines whether an information state σ *supports* φ, or *rejects* φ, and whether *a supposition of* φ *fails* in σ.

The semantics straightforwardly predicts that $p \to (\neg p \to v)$ is always dismissed, because to support or to reject it, both p and $\neg p$ need to be supposable simultaneously. As that's contradictory, the semantics recognizes that a supposition fails.

If there's enough time, I will discuss possible ways to lift the suppositional Andersonian account of deontic modals to a more standard framework with accessibility relations.

[1] I will consider 'must' instead of the more subtle 'ought' although, for the purposes of the puzzle, the distinction does not play a role.

[2] Also see Kanger [10]. For recent proposals on how to avoid classic counter-examples to Andersonian deontic modals, see Barker [4], Asher and Bonevac [3] and Aher [1].

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