What we know and what to do

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Abstract  This paper discusses an important puzzle about the semantics of indicative conditionals and deontic necessity modals (should, ought, etc.): the Miner Puzzle (Parfit, ms; Kolodny and MacFarlane, J Philos 107:115–143, 2010). Rejecting modus ponens for the indicative conditional, as others have proposed, seems to solve a version of the puzzle, but is actually orthogonal to the puzzle itself. In fact, I prove that the puzzle arises for a variety of sophisticated analyses of the truth-conditions of indicative conditionals. A comprehensive solution requires rethinking the relationship between relevant information (what we know) and practical rankings of possibilities and actions (what to do). I argue that (i) relevant information determines whether considerations of value may be treated as reasons for actions that realize them and against actions that don’t, (ii) incorporating this normative fact requires a revision of the standard ordering semantics for weak (but not for strong) deontic necessity modals, and (iii) an off-the-shelf semantics for weak deontic necessity modals, due to von Fintel and Iatridou, which distinguishes “basic” and “higher-order” ordering sources, and interprets weak deontic necessity modals relative to both, is well-suited to this task. The prominence of normative considerations in our proposal suggests a more general methodological lesson: formal semantic analysis of natural language modals expressing normative concepts demands that close attention be paid to the nature of the underlying normative phenomena.

Keywords  Conditional obligation · Deontic modality · Weak and strong deontic necessity · Indicative conditionals · Ordering semantics
1 Introduction

This paper discusses a puzzle about indicatives and deontic modals (*should*, *ought*, etc.), the Miner Puzzle, described in a recent paper of Niko Kolodny and John MacFarlane. It is a little puzzle—tidy and easy to summarize—but it has ramifications, of a foundational nature, for theories of both indicative conditionals and deontic modals. Rejecting modus ponens for the indicative conditional, as Kolodny and MacFarlane propose, seems to solve a version of the puzzle, but is actually explanatorily orthogonal to the puzzle itself. I argue that a genuinely explanatory solution to the Miner Puzzle requires rethinking the relationship between relevant information (what we know) and practical rankings of possibilities and actions (what to do). While Kolodny and MacFarlane do endorse a particular conception of this relationship (albeit incidentally), I argue that it does not, in the end, yield a genuinely explanatory solution to the Miner Puzzle.

Not so with the account developed and defended herein. On that account, relevant information is seen to make a twofold difference in thinking about what to do. It restricts the background of salient possibilities against which deliberation occurs. But it also determines whether considerations of value may be treated as reasons for actions that realize them and against actions that don’t. The Miner Puzzle is not a puzzle about modus ponens. It is, rather, about the special sensitivity of certain ways of expressing obligation in natural language (and, so, certain kinds of obligation) to relevant information—a sensitivity that traces to informational constraints on treating considerations of value as reasons.

In Sect. 2, I describe the puzzle and rule out some first attempts at resolving it. I argue, with Kolodny and MacFarlane, that a solution ultimately requires a genuine rejection of modus ponens for the indicative conditional. But, in Sect. 3, I show that this is actually explanatorily orthogonal to the Miner Puzzle. This is supported by appeal to some results about the semantics of deontic conditionals. The thrust of these results is that a puzzle effectively identical to Kolodny and MacFarlane’s will arise, even on state-of-the-art treatments of indicatives (e.g., those of Angelika Kratzer and Thony Gillies) that invalidate modus ponens. In Sect. 4, I develop this point, highlighting three, specific respects in which Kolodny and MacFarlane’s resolution of the puzzle is theoretically less-than-satisfactory. This is not to say they are wrong, or that their commitment to their account would prevent them from accepting the central elements of mine. It is only to say that the story about the puzzle that they offer will be but a peripheral part of a fully explanatory account.

Finally, in Sects. 5 and 6, I try to tell what I take to be the whole story. On my account, the puzzle really has to do with the special sensitivity of weak deontic necessity modals (*should*, *ought*, etc., in contrast to strong modals like *must*, *have to*, etc.) to relevant information. The nature of this sensitivity can, I show, be modeled in a theoretically satisfying, but still precise, way. One promising way to do this is to avail ourselves of a key insight from a linguistically influential treatment of the meaning of weak necessity modals, due to Kai von Fintel and Sabine Iatridou (and, ultimately, an old idea of Aaron Sloman). On the version of this treatment that I develop, what we *should* do is a function of first-order concerns as well as higher-order concerns (concerning which first-order concerns it is appropriate to treat as reasons in favor of