

## THE MEANING OF 'OUGHT'

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What does the word 'ought' mean? Strictly speaking, this is an *empirical* question, about the meaning of a word in English. Such empirical semantic questions should ideally be answered on the basis of extensive empirical evidence about the use of the word by native speakers of English.

As a philosopher, I am primarily interested, not in empirical questions about the meanings of words, but in the nature of the *concepts* that those words can be used to express — especially when those concepts are central to certain branches of philosophy, as the concepts expressed by 'ought' are central to ethics and to the theory of rational choice and rational belief. Still, it is often easiest to approach the task of giving an account of the nature of certain concepts by studying the meanings of the words that can express those concepts. This is why I shall try here to outline an account of the meaning of 'ought'.

I shall try to argue that this account of 'ought' can deal adequately with some of the empirical linguistic data; but I shall not be able to undertake a sufficiently thorough investigation to be in a position to claim that my account deals adequately with *all* the linguistic data that need to be accounted for, nor that it deals better with the data than any alternative account. In particular, although I shall argue that the word 'ought' can express a large number of systematically related concepts (so that whenever the word 'ought' is used, the linguistic context must determine which of these concepts this occurrence of 'ought' expresses), I shall not be in a position to argue that my account of 'ought' captures *all* the concepts that the word can express. Still, I hope to give some reasons for thinking that my account captures at least *some* of the concepts that the word can express, and that these

concepts are among those that are central to ethics and to the theories of rational choice and rational belief. In this way, I hope that my account should be able to play a useful clarificatory role within those branches of philosophy.

I should emphasize that I am concerned here purely with ‘ought’ (and its near synonym ‘should’), not with all normative or deontic concepts as such. Many philosophical discussions of the meaning of ‘ought’ seem to assume that it is an obvious analytic truth that whenever one “ought” to do something, one has a “duty” or “obligation” to do it. This assumption seems eminently questionable to me. I ought to buy a new pair of shoes, but I surely do not have any duty or obligation to buy a new pair of shoes. Duties and obligations are in some sense “owed” to someone or something that is the object or beneficiary of the duty or obligation, while it is far from clear that anything like that need be true of everything that one “ought” to do. So for at least these reasons, ‘ought’, ‘is obliged’, and ‘has a duty’ must be distinguished. But I shall say nothing further about ‘duty’ and ‘obligation’ here. I shall focus exclusively on the term ‘ought’ instead.

## **1. Understanding and logic**

A good account of the meaning of a term should do two things: first, it should explain what it is to *understand* the term, or to count as a competent user of the term; secondly, it should explain the term’s *logical properties* — which sorts of inferences involving the term are valid, and why. In the case of the term ‘ought’, explaining the logical properties of the term involves explaining the basic principles of *deontic logic*.

Different philosophers of language have taken radically different approaches to both of these tasks. In addressing the first task, most philosophers assume that it is at least part of

understanding a term that one has the ability to use declarative sentences involving that term to express certain mental states. However, philosophers differ over what sort of mental state is normally expressed by the use of declarative sentences involving ‘ought’: cognitivists think that these mental states are just straightforward beliefs, of basically the same kind as the beliefs that are normally expressed by most other declarative sentences; non-cognitivists think that they are mental states of some crucially different kind, such as emotions, or desires or intentions of the sort that are typically expressed by commands or prescriptions.

Philosophers have also taken various different approaches to the second task, including what I shall call the “factualist” approach and the “non-factualist” approach.<sup>1</sup> According to the factualist approach, the fundamental explanation of the logical properties of the term essentially involves the idea that the content of any declarative sentence involving the term is a *proposition* that is either *true* or *false*. According to the non-factualist approach, even if one eventually “earns the right” to speak of propositions that are true or false, the *fundamental* explanation of the term’s logical properties need say nothing about sentences involving these terms having as their contents propositions that are either true or false.

In this paper, I shall just assume that the cognitivist, factualist approach is correct. That is, I shall assume that the mental states that are normally expressed by the use of declarative sentences involving ‘ought’ are perfectly straightforward *beliefs*; and I shall explain the logical properties of ‘ought’ in terms of its contribution to the *truth conditions* of sentences in which it appears; in more technical terms, I shall explain the logical behaviour of ‘ought’ in terms of the word’s *semantic value*.

More specifically, I shall assume that the semantic value of ‘ought’ is some *property* or *relation*, which features in the proposition that is the content of sentences involving ‘ought’. So I shall assume an ontology of propositions, properties and relations — where

propositions, properties and relations are *universals*, which may have a complex structure, being composed, by means of operations analogous to predication, conjunction, negation, and so on, out of objects such as individuals, propositions and relations.<sup>2</sup> (In effect, propositions are 0-place universals, monadic properties are 1-place universals, and the other relations are  $n$ -place universals for some  $n > 1$ .) A further feature of my conception of propositions can be articulated by reference to *possible worlds*: every proposition divides the possible worlds into those worlds where the proposition is true and those where it is false. A *fact* can be identified with a proposition that is true at the *actual* world. There are ontological controversies about how these universals and possible worlds are related to each other: on some accounts, the universals can be constructed out of these possible worlds, while on other accounts, these possible worlds are in effect just big propositions. I shall avoid committing myself to any position on these controversial ontological questions here.

Many philosophers have objected to this cognitivist, factualist approach, and especially to the application of this approach to broadly normative terms like ‘ought’. Unfortunately, I shall not be able to answer most of these objections here; nor shall I be able to explain why I believe the cognitivist, factualist approach to be superior to its non-cognitivist and non-factualist rivals. I shall simply assume cognitivism and factualism for the sake of argument, in order to investigate what sorts of semantics are possible for the term ‘ought’ on the assumption that cognitivism and factualism are correct.

Nonetheless, I shall at least implicitly address one objection to the factualist approach. It might seem that if the word ‘ought’ has a property or relation as its semantic value — or in less precise terms, as its reference — it will hard, if not impossible, to explain *why* the word ‘ought’ has the precise semantic value that it has. In this paper, I shall try to show that this is not so: we can give an illuminating, non-trivial explanation of why the word

‘ought’ has the precise semantic value that it has.

Specifically, I shall attempt to show that the semantic value of the ‘ought’ can be explained on the basis of the word’s *essential conceptual role*. This “conceptual role” is a certain way of using the term in reasoning. It is “essential” in the sense that it is an essential part of understanding the term, or of being a fully competent user of the term, that one has some ability to use the term in this way. In this way, our account of what it is to understand the term can be integrated with our account of the term’s logical properties: to understand the term, one must have some mastery of its essential conceptual role, and it is this conceptual role that explains the term’s semantic value, which in turn explains the term’s logical properties.<sup>3</sup>

## 2. The logical form of ‘ought’

One controversial question emerges immediately, concerning the *logical form* of ‘ought’. Many philosophers understand ‘ought’ as a *propositional operator* — that is, as a term whose semantic value is a function from an embedded proposition (which is indicated in the sentence in which ‘ought’ occurs) to a further proposition. But other philosophers — most notably Peter Geach (1991) — hold that it is a mistake to assume that ‘ought’ is always a propositional operator; according to these philosophers, at least sometimes, ‘ought’ must be understood as a *relational predicate* applying to triples consisting of an agent, a possible course of action, and a time.<sup>4</sup>

In this paper, I shall treat ‘ought’ as a propositional operator wherever it occurs. There are at least some sentences where it certainly seems overwhelmingly plausible that ‘ought’ functions as a propositional operator. For example, consider:

(1) Drinking water ought to be clean and safe.

No particular agent is explicitly mentioned in this sentence: so how can this occurrence of ‘ought’ stand for a relation between an agent, a possible course of action and a time?

It might be suggested that in a particular context of utterance, (1) will contain an implicit reference to an agent, a time, and a possible course of action — namely, the course of action of *bringing it about that drinking water is clean and safe*. But it would be extraordinary if (1) could contain an implicit reference to a particular agent, in a given context of utterance, unless the speaker actually had that agent in mind in making that utterance; and a speaker in uttering (1) need not have any particular agent  $x$  in mind such that by uttering (1) she means to say that  $x$  ought to bring it about that drinking water is clean and safe. In that case, it might be suggested that the speaker means to express the proposition that there is at least *some* agent who ought to bring it about that drinking water is clean and safe. But this proposition has a radically different logical form: it is an existentially quantified proposition, not an atomic proposition. It is surely preferable if the logical form of the proposition that our semantics assigns to an utterance of a sentence bears some systematic relationship to the compositional structure of the sentence. But our semantics will preclude the possibility of any such systematic relationship if (1) sometimes expresses an atomic proposition (when the speaker has a particular agent in mind) and sometimes an existentially quantified proposition (when the speaker has no particular agent in mind).

We can avoid all these problems if we treat ‘ought’ in (1) as a propositional operator. Grammatically, ‘ought’ in English is an auxiliary verb, like the modal auxiliaries ‘can’ and ‘must’. When an occurrence of ‘ought’ modifies the main verb of a sentence, it can be taken as a propositional operator applying to the proposition that would be expressed by the

unmodified form of that sentence. Thus, in (1), ‘ought’ is a propositional operator applying to the proposition that would be expressed by the sentence ‘Drinking water is clean and safe’.

If we treat ‘ought’ as sometimes functioning as a propositional operator, we would clearly achieve a more unified account if we suppose that it always functions as such an operator. We would also be able to unify our account of the auxiliary verb ‘ought’ with that of the modal auxiliaries ‘can’ and ‘must’, which practically all philosophers and semanticists would interpret as propositional operators.<sup>5</sup>

Moreover, there is a further argument, due to Bernard Williams (1981, pp. 119–20), for the conclusion that ‘ought’ always functions as a propositional operator. The kind of ‘ought’ that philosophers like Geach regarded as standing for a relation between an agent and a possible course of action is what Williams called the “practical or deliberative *ought*”. The way in which this kind of ‘ought’ differs from other kinds can be illustrated by this example:

- (2) Fred ought to have enough food for his family for Christmas.

We can distinguish at least two different readings of this sentence. The first reading would be appropriate if the reason for uttering this sentence is that Fred has promised to do the Christmas food shopping for his family, but is an unreliable person who is all too likely to forget to go to the shops before they close. The second reading would be appropriate if the reason for uttering the sentence is because Fred is too desperately poor to buy enough food for his family for Christmas, and the speaker is commenting on what a deplorable state of affairs this is. These two different readings could differ in truth value: on the first reading, the sentence is false unless Fred has a reasonably reliable *ability* to ensure that he has enough food for his family for Christmas, while on the second reading, the sentence could be true

even if Fred has no such ability.

The first sort of ‘ought’ is often used to express either advice or a conclusion of deliberation or practical reasoning about what to do. This is why Williams called it “the practical or deliberative *ought*”. This label might be misleading if it suggests that this sort of ‘ought’ can *only* be used to express conclusions of deliberation (in first-person contexts), or advice (in second-person contexts). There is no reason to think that this sort of ‘ought’ cannot occur in third-person or past-tensed contexts (as in “Napoleon ought not to have invaded Russia”) where there is no question of the speaker’s giving advice or deliberating about what to do; and we should not assume that ‘ought’-statements that are more naturally described as *theoretical* rather than practical (such as “You ought to proportion your belief to the evidence”) must involve a different kind of ‘ought’. The point is just that this sort of ‘ought’ is particularly appropriate for expressing advice or deliberation.

The second sort of ‘ought’ is what Sidgwick called “the political *ought*”.<sup>6</sup> This label is also potentially misleading, since many occurrences of this sort of ‘ought’ have nothing to do with politics (it might be better to call it “the *ought* of general desirability”); but I shall stick with Sidgwick’s term here.

It is the first sort of ‘ought’ — the practical or deliberative ‘ought’ — that Geach construed as standing for a relation between an agent and a possible course of action, rather than as a propositional operator. But suppose that a group of people are involved in a joint deliberation, as a result of which a speaker concludes:

- (3) Someone ought to go and inform the manager.

Even if one keeps constant the interpretation of ‘ought’ as having its practical or deliberative

sense here, this sentence is clearly ambiguous. The ambiguity is most naturally interpreted as involving a scope ambiguity: on one reading, (3) means ‘It ought to be that: someone goes and informs the manager’; on the other reading, it means ‘Someone is such that: *he* ought to go and inform the manager’. On the first reading, the only agent who could possibly be the “subject” of the ‘ought’ is presumably the group involved in the joint deliberation, viewed as a collective agent. But this collective agent is not explicitly mentioned in the sentence, and so, for similar reasons to those that applied in the case of (1), ‘ought’ in this first reading of (3) must be a propositional operator; and as Williams says (1981, p. 116), “it is hard to see what requires it, or even allows it, to turn into something else” in the second reading. So there seems to be a reason for treating even the practical or deliberative ‘ought’ as a propositional operator.

If that is right, then the crucial difference between the two readings of (2) is not a difference in logical form. Rather, it seems that they must involve different kinds of ‘ought’-operator — namely, the “practical” and the “political” ‘ought’-operators respectively. One of the main differences between the practical and the political ‘ought’ seems to be that the practical ‘ought’ is at least implicitly *indexed* to an agent and a time. For example, in the reading of (2) on which it involves the practical ‘ought’, the ‘ought’-operator is indexed to Fred and to some period of time (presumably, some period of time before the food shops close for Christmas); for this reading of (2) to be true, the proposition to which this ‘ought’-operator is attached (‘Fred has enough food for his family for Christmas’) must be capable of being realized by *Fred’s* exercising some of the abilities that he has *at that time*.<sup>7</sup> The political ‘ought’, on the other hand, is not indexed to any particular agent and time in this way; this is why the reading of (2) on which it involves the political ‘ought’ can be true even if Fred lacks the ability to realize this proposition at that (or indeed any other) time.

As we have seen, the main difference between the two readings of (3) is not in the kind of ‘ought’ involved (both readings involve the practical or deliberative ‘ought’), but in the relative scope of the quantifier and the ‘ought’-operator. However, once we recognize that the practical ‘ought’ is always indexed to some agent, we see that in these two readings of (3), ‘ought’ must be indexed to different agents: on the first reading, it is indexed to “us” (the group engaged in the joint deliberation), whereas on the second reading, it is indexed to the agent-variable bound by the quantifier ‘Someone ...’.

For most of this paper, I shall focus on the practical or deliberative ‘ought’. (In the last section, I shall explore how my account can be generalized to deal with other kinds of ‘ought’ as well.) I shall represent the practical ‘ought’-operator that is indexed to the agent  $A$  and time  $t$  by the symbol ‘ $O_{\langle A, t \rangle}$ ’.<sup>8</sup>

In the spirit of classical logic and unrestricted compositionality, I shall suppose that if there is a propositional operator ‘ $O_{\langle A, t \rangle}$ ’, then this operator can be attached to *any* proposition  $p$ , to yield a further proposition ‘ $O_{\langle A, t \rangle}(p)$ ’ that will have a definite truth value, either true or false. But we should note that it will in many cases be hard to find a sentence of standard English (or any other natural language that I know) that has the complex proposition ‘ $O_{\langle A, t \rangle}(p)$ ’ as its content.

In English, one common way to convey that an occurrence of ‘ought’ has its “practical or deliberative” sense, and is indexed to a particular agent  $A$ , is to make  $A$  the grammatical subject of ‘ought’. (Making an agent the grammatical subject of ‘ought’ does not always indicate that this occurrence of ‘ought’ is indexed to that agent: one mafioso might advise another ‘Alfredo ought to be killed before he talks to anyone’; if this is the practical ‘ought’, it is indexed not to Alfredo — the grammatical subject of the verb ‘ought’ — but rather to the advisee.) But in English, the proposition to which the ‘ought’-

operator is attached is indicated by an *infinitive* — where the grammatical subject of the infinitive must be the same as the subject of the auxiliary verb ‘ought’. So there is simply no way in grammatical English to affix the phrase ‘You ought ...’ to an expression that indicates a proposition that does not somehow involve the person referred to as ‘you’. For this reason, when the practical ‘ought’-operator ‘ $O_{\langle A, t \rangle}$ ’ is conveyed in English by the phrase ‘At  $t$ ,  $A$  ought ...’, there is a *grammatical* barrier to attaching this ‘ought’-operator to any propositions that do not in some way involve  $A$ . Nonetheless, according to my assumptions, there is no *logical* barrier to attaching the operator ‘ $O_{\langle A, t \rangle}$ ’ to propositions that have nothing to do with  $A$ . (If  $p$  is a proposition that does not in any way involve  $A$ , then we *cannot* convey ‘ $O_{\langle A, t \rangle}(p)$ ’ by saying ‘At  $t$ ,  $A$  ought to bring it about that  $p$ ’; the proposition  $p$  and the proposition ‘ $A$  brings it about that  $p$ ’ are obviously distinct propositions, which must not be confused with each other.<sup>9</sup>)

Another way of conveying the operator ‘ $O_{\langle A, t \rangle}$ ’ (more common in other languages than in English) is to use an impersonal construction like ‘It ought to be the case that ...’, and leave it *implicit* in the context that this occurrence of ‘ought’ is indexed to a particular agent  $A$  and time  $t$ . Even if one uses a personal construction, so that the relevant agent is the grammatical subject of the auxiliary verb ‘ought’, it is still merely implicit in the context that this occurrence of ‘ought’ has its practical or deliberative sense (as opposed to its “political” sense, or some other sense). Because the practical ‘ought’ is especially connected with deliberation and advice, the easiest way to indicate that it is the practical ‘ought’ that is in play is if the context somehow makes it clear that the statement is made from the standpoint of the relevant agent’s deliberations about what to do at the relevant time (or of someone advising the agent about what to do at that time). It will be very hard to convey that a statement is made from this standpoint if the proposition embedded inside in the ‘ought’-

operator is causally independent of everything that the agent might do or think at that time; as Aristotle famously observed,<sup>10</sup> no one deliberates about things that they cannot affect in any way. So, if nothing that the agent could do or think at that time will make any difference to whether or not  $p$  is the case, then it will be almost irresistible to hear the sentence ‘It ought to be the case that  $p$ ’ as involving a different sort of ‘ought’. For example, if someone says, ‘You ought to have been born ten years earlier than you were’, or ‘You ought to have been born at exactly the time that you were born’, it will be almost impossible to hear this as involving the practical ‘ought’ (as opposed to some other kind of ‘ought’). Still, I am assuming that in principle, *any* proposition  $p$  can be embedded inside the practical ‘ought’-operator indexed to an agent  $A$  and time  $t$ , ‘ $O_{\langle A, t \rangle}$ ’, to yield another more complex proposition ‘ $O_{\langle A, t \rangle}(p)$ ’.

We might try enriching natural language by introducing an explicitly indexed ‘ought’-operator: ‘It ought, from the standpoint of  $A$  and  $t$ , to be the case that ...’. But we have no clear intuitions about sentences like ‘It ought, from the standpoint of me and now, to be the case that there are nine planets in the solar system’, even though, as noted above, I shall assume here that this proposition has a truth value. In the absence of any clear intuitions about these propositions, the question of what their truth conditions are must be decided by theoretical considerations, rather than by any direct appeal to intuition.

To sum up: I shall treat ‘ought’ as a propositional operator whenever it occurs. The “practical or deliberative ‘ought’” (unlike what Sidgwick called the “political ‘ought’”) is implicitly indexed to a particular agent and time. It will be hard to hear ‘ought’ as having this practical or deliberative sense, and as indexed to a particular agent  $A$  and time  $t$ , if the proposition that is embedded within the ‘ought’-operator is causally independent of all of  $A$ ’s thoughts and actions at  $t$ . But this does not make it impossible for such propositions to be

embedded inside this operator. Indeed, I shall suppose that the proposition ' $O_{\langle A, t \rangle}(p)$ ' has a definite truth value whatever the embedded proposition  $p$  may be. It might be hard to express this proposition using 'ought' in ordinary English; but this proposition will be true or false nonetheless.

### 3. Conceptual role semantics for the practical 'ought'

According to my version of conceptual role semantics, the semantic value of the practical or deliberative sense of the term 'ought' is determined by the role that the term essentially plays, when it has this sense, in *practical reasoning* or *deliberation*. Specifically, when it is used in this sense, the term's essential conceptual role is given by the following rule:

Acceptance of the first-person statement ' $O_{\langle me, t \rangle}(p)$ ' — where ' $t$ ' refers to some time in the present or near future — commits one to making  $p$  part of one's plan about what to do at  $t$ .

As I noted earlier, I am assuming a *cognitivist* interpretation of 'ought' sentences here; so I shall assume that to "accept" the sentence is just to *believe* the proposition that the sentence expresses. To say that a belief "commits" one to making a certain proposition part of one's plan is to say that, if one holds this belief, and the belief is itself rational, then that would make it *irrational* for one not to make that proposition part of one's plan.

A "plan about what to do a  $t$ ", as I am understanding it, is just a proposition — roughly, a proposition that represents a way in which one might behave at  $t$ , and a way things might be if one did behave in that way. To "adopt" the proposition  $p$  as one's plan about what

to do at  $t$  is to have a set of intentions about what to do at  $t$  such that, if the conjunction of the contents of those intentions is the proposition  $q$ , one believes the proposition ‘If it were the case that  $q$ , it would be the case that  $p$ ’. Then we can define “making the proposition  $p$  a part of one’s plan” simply as: adopting as one’s plan a proposition that logically entails  $p$ .

We could also introduce a similar operator ‘ $P$ ’ — the practical or deliberative ‘may’, which some philosophers indicate by the term ‘permissible’ — whose essential conceptual role is given by the following rule:

Acceptance of the first-person statement ‘ $P_{\langle me, t \rangle}(p)$ ’ — where ‘ $t$ ’ refers to some time in the present or near future — permits one to treat  $p$  as allowed by one’s plan about what to do at  $t$ .

To treat a proposition  $p$  as “allowed” by one’s plan is, in effect, to be disposed not to adopt as one’s plan any proposition that is *inconsistent* with  $p$ . To say that a belief “permits” one to treat a certain proposition as allowed by one’s plan is to say that if one holds this belief, and the belief is rational, then that would make it *not irrational* for one to treat that proposition as allowed by one’s plan.

If this rule gives the essential conceptual role of the practical or deliberative ‘ought’, then understanding this sense of ‘ought’ will involve having some mastery of this rule; and to have some mastery of this rule, one must presumably have at least some disposition to follow the rule. To follow this rule, one must respond to any rational belief in a proposition that can be expressed by a sentence of the form ‘ $O_{\langle me, t \rangle}(p)$ ’ by making the embedded proposition  $p$  part of one’s plan about what to do at  $t$ . Thus, anyone who understands the practical or deliberative ‘ought’ must have some disposition to respond to their own rational beliefs about

what they ought to do by planning accordingly. In this way, the claim that the essential conceptual role of the practical ‘ought’ is given by this rule can explain why a certain form of “normative judgment internalism” is true: rational beliefs involving this sort of ‘ought’ must have some disposition to be accompanied by a corresponding plan about what to do (at least so long as the agent to whom this occurrence of ‘ought’ is indexed is the thinker herself, represented in the first person, and the time to which it is indexed is represented as in the present or near future).<sup>11</sup>

In following this rule, it is crucial that one should exhibit some sensitivity to whether or not one belief in this proposition is rational. This is a fundamental difference between rules about how one mental state *commits* one to having another mental state, and rules about how one mental state counts as a *ground* or *basis* for having another mental state. In some cases, simply *having* a mental state is enough to make that mental state a ground or basis for a further mental state, regardless of whether or not that first mental state is rational; in these cases, the first mental state does not in my sense “commit” one to that further mental state. This point helps to explain the particular way in which, according to my account, the essential conceptual role of this term ‘ $O_{\langle A, t \rangle}$ ’ can explain the term’s semantic value.

Within the “factualist” semantic framework that I am assuming here, the semantic value of the operator ‘ $O_{\langle A, t \rangle}$ ’ will be a certain property of propositions — presumably, a relational property that propositions have in virtue of some relation in which they stand to the agent  $A$  and the time  $t$ . But how can the essential conceptual role of this operator, as given by the rule specified above, determine the operator’s semantic value?

The rule specified above can determine this operator’s semantic value because the semantic value is determined as the *weakest* property of propositions that guarantees that all instances of that rule *valid* — as I shall put it, it is that semantic value that “makes” the

instances of the rule valid. But what does it mean to say that an instance of this rule is valid?

An instance of a rule can be regarded as having “inputs” and an “output”, where these inputs and outputs are types of mental state. Where the rule is a rule about how one type of mental state *commits* one to another mental state, it would not be plausible to say that for an instance of such a rule to be valid, whenever one is *in* the input state, the output state must be a correct or appropriate state to be in. (That might be plausible for a rule that is merely about how one mental state counts as a ground or basis for another.) What is required is rather, roughly, that the *correctness* of its inputs guarantees the correctness of its output.<sup>12</sup> In the case of certain rules of *inference*, the inputs and output can be regarded as beliefs; and a belief is correct if and only if the proposition believed is true. So an instance of such a rule of inference is valid if and only if the truth of the contents of its inputs guarantees the truth of the content of its output. In this way, the notion of the “validity” of an instance of a rule is closely related to the notion of the logical validity of an inference. But other mental states besides beliefs can also be called correct or incorrect. So the notion of the validity of instances of a rule has wider application, besides its application to rules of inference.

More precisely, if the content of the rule is that the input mental states *commit* one to having the output mental state as well, then the semantic value of the operator in question must make it the case that the correctness of the input mental states guarantees that the output mental state is *uniquely* correct — that is, that it is the *only* correct mental state of that kind to have towards the proposition in question. If the rule is a rule about how the input mental states *permit* one to have the output mental state as well, then although the correctness of the input mental states must guarantee the correctness of the output state, it need not guarantee that that output state is uniquely correct. (This distinction between correct mental states and uniquely correct mental states is particularly important with respect to plans and intentions

about what to do: if one is in a “Buridan’s ass” situation, then it is correct to form an intention to go to the left, and also correct to form an intention to go to the right, but neither intention is *uniquely* correct.)

On this approach, then, the semantic value of the practical ‘ought’-operator ‘ $O_{\langle A, t \rangle}$ ’ will be that property of a proposition  $p$  that makes it the case that the *only* correct way for  $A$  to relate the proposition  $p$  to her plan about what to do at  $t$  is to make  $p$  part of that plan. As I have explained, to make  $p$  part of one’s plan is to adopt as one’s plan a proposition that logically entails  $p$ . The obvious alternative way for  $A$  to relate  $p$  to her plan is to adopt as her plan a proposition that logically entails the *negation* of  $p$ . If the *only* correct way for  $A$  to relate  $p$  to her plan about what to do at  $t$  is to make  $p$  part of that plan, then it must be correct for  $A$  to adopt as her plan a proposition that entails  $p$ , and not correct for  $A$  to adopt as her plan a proposition that entails the negation of  $p$ . Thus, my account leads to the following account of the semantic value of ‘ $O_{\langle A, t \rangle}$ ’: for any proposition  $p$ , ‘ $O_{\langle A, t \rangle}(p)$ ’ is true just in case there are correct plans (for  $A$  to have about what to do at  $t$ ) that logically entail  $p$ , and no such correct plans that logically entail the negation of  $p$ .

In this way, this approach to the semantics of ‘ought’ rests on the idea that there is a notion of “correctness” that can be applied to plans. It is admittedly not very common in ordinary English to describe plans as “correct” or “incorrect”. But we do often speak of someone’s making the “right choice” or the “wrong decision”, or describe someone’s decision as a “mistake”. In these contexts, the terms ‘right’, ‘wrong’ and ‘mistake’ seem to be being used in the same sense as when we talk of a *belief*’s being right or wrong or a mistake; and choices and decisions are mental events in which we adopt or revise our plans about what to do. So we can say that a plan is correct if and only if it is a plan that it is in this sense right (not wrong or a mistake) to adopt. If there is indeed a genuine notion of “correct plans”, then

there should be no more objection to using this notion in the metalanguage in which we are giving our semantic theory than there is to using the notion of a “correct belief” or a “true proposition” in our metalanguage.

It seems plausible that this notion of a “correct plan” is itself a broadly normative notion. Indeed, we might try to explain what it is for an attitude to be “correct” along the lines suggested by Wiggins’ (1989, p. 147) idea that “truth is the primary dimension of assessment for beliefs”, together with Dummett’s (1993, pp. 42–52) idea that the root of our concept of truth is our grasp of what it is for a belief or an assertion to be correct. Following this suggestion, we might say that for a mental state to be “correct” is just for it to conform to the “primary” norm (or “dimension of assessment”) that applies to mental states of that type. Unfortunately, however, I cannot undertake to give a full account of the relevant notion of “correctness” here.<sup>13</sup>

If the notion of a “correct plan” is indeed a normative notion, then my account of the semantic value of ‘ought’ does not give any identification of this semantic value in non-normative terms; on the contrary, its identification of this semantic value uses the broadly normative notion of a “correct plan”. In this sense, my account of the meaning of this sort of ‘ought’ is not a “naturalistic” account. (My account is, at least *prima facie*, *compatible* with the claim that the property that these uses of ‘ought’ refer to is in fact a natural property — that is, a property that can be picked out in wholly non-normative terms. But my account does not *imply* that this property is a natural property. If it is a natural property, that is not something that one could simply read off the semantics for the practical ‘ought’ that I have given here.)

It is because my account is not “naturalistic” in this strong sense that it can escape the dilemma that Terry Horgan and Mark Timmons (2000) have deployed against all forms of

“naturalistic moral realism”. According to Horgan and Timmons, every naturalistic account of the reference of a moral term will be vitiated by one or the other of the following two fatal flaws. The *first* flaw is that the account will simply fail to assign any determinate reference to the moral term at all. If the account is to avoid this first flaw, and to assign a determinate reference to the moral term, it will have to pick on a certain relation  $R$  in which we stand to a unique property, and claim that it is in virtue of our standing in relation  $R$  to that property that our moral term refers to the property. But now, according to Horgan and Timmons, the account will fall into the *second* flaw, since they claim for every such relation  $R$ , it is possible for there to be a community of speakers that do *not* stand in that relation to that particular property — even though intuitively it seems that the members of that other community also use terms that express moral concepts and have the very same reference as our moral terms.

This argument is plausible only if it is assumed that this relation  $R$  is a purely natural relation, and not itself a *normative* relation. But in my account, the relation in virtue of which these uses of ‘ought’ refer to the relevant property is itself a normative relation. In my account, this relation is the following: first, these uses of ‘ought’ express a concept whose essential conceptual role consists in the way in which certain beliefs involving this concept *commit* one to incorporating a certain proposition into one’s plans; and secondly, this concept refers to the property that makes this sort of practical reasoning *valid* — that is, the property of a proposition  $p$  that makes it *correct* for one to incorporate the proposition  $p$  into one’s plans about what to do at  $t$ , and *incorrect* to incorporate the negation of  $p$  into one’s plans about what to do at  $t$ .

It seems plausible to me that a community that had *no* term that ever expressed a concept whose essential conceptual role was this role in practical reasoning and planning would *not* have any terms for the practical or deliberative ‘ought’. However, so long as

certain uses of a term in their language do express such a concept, then according to my account, those uses of that term *must* have the same reference as the corresponding uses of our term ‘ought’. In the case of belief, it seems to be the very same property of a proposition  $p$  — namely, *truth* — that makes it correct for members of one community to believe the proposition  $p$  as makes it correct for members of any other community to believe  $p$ . But the same point, it seems to me, holds for the case of plans as well. It is the very same relation between a proposition  $p$ , an agent  $A$  and a time  $t$  that makes it uniquely correct for members of one community to incorporate the proposition  $p$  into their plans as makes it uniquely correct for members of any other community to do so. So long as a community uses a term to express a concept that has this essential conceptual role in practical reasoning and planning, my account will demand that if one of those uses of the term is indexed to an agent  $A$  and time  $t$ , then it refers to the property of standing in that relation to  $A$  and  $t$ . In this way, then, my account escapes both horns of Horgan and Timmons’ dilemma.

Since my account of the meaning of ‘ought’ itself makes use of normative terms, some philosophers may complain that my account of the meaning of ‘ought’ is viciously circular. But this complaint is mistaken. No one demands that an account of what it is for a word to mean *cow*, for example, must make no mention of any relation in which that word stands to actual cows. No one demands that an account of what it is for a word to mean *not* must refrain from using any words (like ‘not’) that have that very meaning. All that it is reasonable to demand is that the account should not presuppose the idea of a word’s having that meaning (or expressing that concept). It should instead give an informative account of *what it is* for a word to have that meaning (or of what it is for the concept that is expressed by the word to be that concept). One way to dramatize this demand is by imagining the situation of a “radical interpreter”.<sup>14</sup> An adequate account of the meaning of the practical or

deliberative ‘ought’ would give an illuminating explanation of how, at least in principle, such a radical interpreter could identify a term in an unknown language as having this meaning. According to my account, to identify a term as having this meaning, an interpreter would have to acquire some reason to think that the term expresses a concept that has the essential conceptual role that I have sketched above. In principle, one could acquire reason to think this in just the same way as one could acquire reason to think that a term in an unknown language expresses a concept that has the essential conceptual role that is given by the introduction and elimination rules for one of the logical constants like ‘or’ and ‘if’. For this reason, my account is not viciously circular.

It would also not be fair to complain that my account is trivial or uninformative. First, as we have already seen, my account can give an explanation of why a certain sort of “normative judgment internalism” is true. Secondly, in the next section, I shall give another example of how my account of the meaning of the practical ‘ought’ has substantive consequences. Specifically, I shall explain how, given plausible claims about the nature of planning and practical reasoning, my account of the semantic value of the practical ‘ought’ can explain which principles of *deontic logic* are correct for this sort of ‘ought’. (I should warn my readers that the next section will be fairly technical; readers who are not interested in deontic logic are invited to skip this section.)

#### **4. The logic of the practical ‘ought’**

The general idea of how this account of the semantics of the practical ‘ought’ can provide an explanation for the principles of deontic logic is fairly straightforward. According to this account, the meaning of this kind of ‘ought’ is given by its essential conceptual role in

practical reasoning; and the term's semantic value is that property of a proposition that makes it correct for the relevant agent to adopt plans that entail that proposition, and incorrect for her to adopt plans that entail the negation of that proposition. So, if there are consistency constraints on correct planning and practical reasoning, then there will be corresponding consistency constraints on statements involving the 'ought'-operator. These consistency constraints are in effect precisely what deontic logic consists in — namely, principles, flowing from the very meaning of the term 'ought' itself, about which sets of 'ought'-statements are consistent and which are not. So, on the approach that I am recommending, the source of deontic logic lies in these consistency constraints on planning and practical reasoning.

It certainly seems plausible that there are consistency constraints on planning. Many of these consistency constraints stem from the idea that to be correct our plans must be *realizable*. In some sense, it is part of what plans are *for* that they should guide us to act in such a way as to realize those plans. Thus, a plan that simply cannot be realized fails in a dramatic way to achieve the result that plans exist to achieve. Hence, I shall suppose, no such plan can be "correct". (Strictly speaking, the realizability constraint on planning takes two forms. First, there is a realizability constraint that is relative to the agent's *beliefs* — that is, the agent should not adopt a plan if he *believes* that it cannot be realized; this constraint is what I shall call a "constraint on *rational* planning". Secondly, there is a realizability constraint that is relative to the *facts* of the agent's situation — that is, the agent should not adopt a plan that cannot *in fact* be realized; it is constraints of this second kind that I shall call "constraints on *correct* planning".)

In fact, however, my specification of the semantic value of the practical 'ought' already reflects some of these consistency constraints on correct plans. For any two

propositions  $p$  and  $q$ , if  $p$  is logically equivalent to  $q$ , then there are correct plans that logically entail  $p$  and no correct plans that logically entail the negation of  $p$  if and only if there are correct plans that logically entail  $q$  and no correct plans that logically entail the negation of  $q$ . So if  $p$  and  $q$  are logically equivalent, then so too are ' $O_{\langle A, t \rangle}(p)$ ' and ' $O_{\langle A, t \rangle}(q)$ '. In this sense, the operator ' $O_{\langle A, t \rangle}$ ' behaves like a *classical* modal operator: it permits the substitution of logical equivalents.<sup>15</sup>

Moreover, suppose that there are correct plans that logically entail ' $p \ \& \ q$ ', and no correct plans that logically entail the negation of ' $p \ \& \ q$ ' (so, given my account, ' $O_{\langle A, t \rangle}(p \ \& \ q)$ ' is true). Then there are correct plans that logically entail  $p$  and no correct plans that logically entail the negation of  $p$  (since any plan that entailed the negation of  $p$  would also entail the negation of ' $p \ \& \ q$ '); and similarly, there are correct plans that logically entail  $q$  and no correct plans that logically entail the negation of  $q$ . So, the operator ' $O_{\langle A, t \rangle}$ ' also behaves like a *monotonic* modal operator: that is, it *distributes over conjunction*; ' $O_{\langle A, t \rangle}(p \ \& \ q)$ ' entails ' $O_{\langle A, t \rangle}(p)$ ' and ' $O_{\langle A, t \rangle}(q)$ '.<sup>16</sup>

To defend the other logical principles that apply to the practical 'ought'-operator, however, we need to appeal more explicitly to the idea that any correct plan for an agent  $A$  to have about what to do at a time  $t$  must be *fully realizable* by  $A$  at  $t$ . I propose that this idea should be understood in the following way.

First, let us define what it is for a proposition to be realizable by  $A$  at  $t$ . To say that a proposition  $p$  is "realizable" by  $A$  at  $t$  is to say that  $A$  has some set of abilities such that there are possible worlds in which all the actual truths that are causally independent of whatever  $A$  might do or think at  $t$  hold, and  $A$  exercises those abilities at  $t$ , and in all those worlds,  $p$  is true. (Thus, all the actual truths that are causally independent of whatever  $A$  might do or think at  $t$  will, in a degenerate sense, be realizable by  $A$  at  $t$ . Roughly, for a truth  $p$  to be "causally

independent of whatever  $A$  might do or think at  $t$ ” is for it *not* to be the case that there is some thought or course of action such that there are nearby possible worlds in which  $A$  has that thought or performs that action at  $t$ , and in all such worlds,  $p$  is not true.)

Secondly, it is a crucial feature of plans that we can adopt a *partial* plan, and then fill in the details of the plan (by adding further conjuncts to the proposition that we have adopted as our plan) as time goes by. Let us say that a *maximally detailed plan* for an agent  $A$  and a time  $t$  is one such that for every proposition  $p$  that is realizable by  $A$  at  $t$ , the plan logically entails either  $p$  or its negation. Then we can articulate the constraint on correct plans as follows: a plan is correct only if it is possible to extend the plan into a maximally detailed correct plan that is itself a realizable proposition.

Now suppose that (i) there are correct plans (for  $A$  to have about what to do at  $t$ ) that entail  $p$ , and no such correct plans that entail the negation of  $p$ , and in addition (ii) there are correct plans that entail  $q$  and no such correct plans that entail the negation of  $q$ . Since every correct plan is fully realizable, the propositions  $p$  and  $q$  must be realizable. So the correct plans that entail  $p$  must be capable of being extended into a maximally detailed plan that entails either  $q$  or the negation of  $q$ . But there are no correct plans that entail the negation of  $q$ . So the only correct maximally detailed extensions of these plans entail  $q$ . So there are correct plans that entail both  $p$  and  $q$ ; hence there are correct plans that entail ‘ $p \ \& \ q$ ’. But there cannot be any correct plans that entail the negation of ‘ $p \ \& \ q$ ’ (if there were such correct plans, there would have to be correct maximally detailed extensions of those plans that entailed either the negation of  $p$  or the negation of  $q$ ; but by hypothesis there are no such correct plans). Hence, given my account of its meaning, the practical ‘ought’-operator ‘ $O_{\langle A, t \rangle}$ ’ also behaves like a *regular* modal operator: that is, it *agglomerates over conjunction*; ‘ $O_{\langle A, t \rangle}(p)$ ’ and ‘ $O_{\langle A, t \rangle}(q)$ ’ taken together entail ‘ $O_{\langle A, t \rangle}(p \ \& \ q)$ ’.

Moreover, if correct plans must be realizable, then any proposition that is logically entailed by a correct plan must also be realizable. Hence, given my account of its meaning, if ' $O_{\langle A, t \rangle}(p)$ ' is true, then  $p$  must itself be realizable. Clearly it is logically impossible for any logically false proposition to be realizable. Hence, the practical 'ought'-operator ' $O_{\langle A, t \rangle}$ ' also conforms to the so-called D principle of modal logic: if  $p$  is logically false, then ' $O_{\langle A, t \rangle}(p)$ ' is also logically false.

So far, I have argued in favour of all the principles of von Wright's original (1951) deontic logic. But in fact, the account that I have given so far also supports the final principle that is needed to turn von Wright's system into standard deontic logic. This principle is the *rule of necessitation*, according to which if  $p$  is a logical truth, then so is ' $O_{\langle A, t \rangle}(p)$ '. Now, the logical principles that I have already defended are enough to show that if there is any truth of the form ' $O_{\langle A, t \rangle}(q)$ ', then for every logical truth  $p$ ,  $p$  follows from  $q$ , whatever  $q$  may be, and so ' $O_{\langle A, t \rangle}(p)$ ' is true as well. But need there be any truth of the form ' $O_{\langle A, t \rangle}(q)$ '? (Perhaps for some  $A$  and  $t$ , there are *no* correct plans for  $A$  to have about what to do at  $t$ ?) If so, then this argument will not show that ' $O_{\langle A, t \rangle}(p)$ ' is a logical truth whenever the embedded proposition  $p$  is also a logical truth.

The most intuitive way to argue for the rule of necessitation is probably to focus in the first instance, not on the 'ought'-operator, but on the 'may' operator ' $P_{\langle A, t \rangle}$ '. The semantics that I suggested above for this operator naturally leads to the conclusion that the semantic value of this operator ' $P_{\langle A, t \rangle}$ ' is that property of a proposition  $p$  that makes it the case that it is correct (though not necessarily uniquely correct) for  $A$  to treat the proposition  $p$  as "allowed" by her plans about what to do at  $t$ . As I suggested earlier, to treat  $p$  as "allowed" by one's plans is to be disposed not to adopt any plans — even maximally detailed plans — that are inconsistent with  $p$ . So the natural conclusion to draw is that the semantic value of

this operator ' $P_{\langle A, t \rangle}$ ' is that property of propositions that makes it the case that there is at least one maximally detailed correct plan (for  $A$  to have about what to do at  $t$ ) that is consistent with  $p$  (which is not to say that there cannot also be *other* correct plans that are inconsistent with  $p$ ).

Obviously, however, a logical falsehood is not consistent with anything; so in particular if  $p$  is a logical falsehood then  $p$  is not consistent with any correct plans (let alone maximally detailed correct plans) for  $A$  to have about what to do at  $t$ . So if  $p$  is a logical falsehood, then ' $P_{\langle A, t \rangle}(p)$ ' cannot be true. Since we relied on nothing but logic and the semantics of the operator ' $P_{\langle A, t \rangle}$ ' to establish that ' $P_{\langle A, t \rangle}(p)$ ' cannot be true, ' $P_{\langle A, t \rangle}(p)$ ' must also be a logical falsehood.

It is also plausible that the two operators, 'ought' and 'may', ' $O_{\langle A, t \rangle}$ ' and ' $P_{\langle A, t \rangle}$ ', are *duals* of each other.<sup>17</sup> 'It may permissibly be the case that ...' is definable as 'It is not the case that it ought not to be the case that ...', and vice versa (that is, ' $P_{\langle A, t \rangle}$ ' is definable as ' $\neg O_{\langle A, t \rangle} \neg$ ', and ' $O_{\langle A, t \rangle}$ ' as ' $\neg P_{\langle A, t \rangle} \neg$ ').<sup>18</sup> But then if  $p$  is a logical truth, ' $\neg p$ ' is a logical falsehood, and so ' $P_{\langle A, t \rangle}(\neg p)$ ' must also be a logical falsehood, and ' $\neg P_{\langle A, t \rangle}(\neg p)$ ' must be a logical truth. So if  $p$  is a logical truth, ' $O_{\langle A, t \rangle}(p)$ ' must also be a logical truth. That is, the rule of necessitation is sound.

A simpler but perhaps less intuitive argument for the rule of necessitation starts from the point that as I am understanding the term, one's "plans" for what to do at  $t$  do not just consist of one's *intentions* about what to do at  $t$ . As I put it earlier, to "adopt" the proposition  $p$  as one's plan about what to do at  $t$  is to have a certain set of intentions such that, if the conjunction of the contents of those intentions is the proposition  $q$ , one *believes* the proposition 'If it were the case that  $q$ , it would be the case that  $p$ '. In this way, the proposition that one adopts as one's plan incorporates not just one's intentions but also one's *beliefs*

*about the causally independent facts.* It is especially important for one's plan to incorporate one's beliefs about the causally independent facts that will determine what the causal consequences of one's actions will be. Of course, many of the other causally independent facts will be less practically relevant than these; and in a sense, it is quite redundant for one to incorporate these practically irrelevant facts into one's plan. But however practically irrelevant these facts may be, it is not *incorrect* to incorporate such facts into one's plan (indeed, if a correct plan is "maximally detailed" in the sense that I defined above, it would have to entail all such causally independent facts). Logical truths are always among the truths that are causally independent of what one does. So it will always be correct to incorporate such logical truths into one's plans (and of course it will never be correct to incorporate the negations of such logical truths into one's plans). Thus, the rule of necessitation is guaranteed to be sound: if  $p$  is a logical truth, so too is ' $O_{\langle A, t \rangle}(p)$ '.

More generally, it is correct to incorporate any causally independent truths into one's plans. So if  $p$  is such a causally independent truth, then ' $O_{\langle A, t \rangle}(p)$ ' is true.<sup>19</sup> (Unless the causally independent truth  $p$  is itself a logical truth, then ' $O_{\langle A, t \rangle}(p)$ ' will be a truth but not a logical truth; this is because unless  $p$  is a logical truth, then logic alone cannot tell us whether or not  $p$  is a causally independent truth.)

It must be conceded that unlike the other principles of deontic logic that I have argued for, the rule of necessitation is not intuitively obvious. As I already mentioned (in § 2) in defending my view of the logical form of 'ought', it is hard to hear the term 'ought' as having its practical or deliberative sense and as indexed to an agent  $A$  and time  $t$ , unless the proposition embedded inside the operator is one whose truth value is causally dependent on  $A$ 's thoughts or actions at  $t$ . So it is hard to hear the term 'ought' as having its practical or deliberative sense in sentences like 'It ought to be the case that the number 3 is not both

prime and not prime’, and it is all but impossible to hear this occurrence of ‘ought’ as indexed to a particular agent and time. As I emphasized earlier (at the end of § 2), we cannot rely on a direct appeal to intuition to evaluate sentences of this kind: we must appeal to theoretical considerations instead; and as I have argued, these theoretical considerations come down in favour of the rule of necessitation.<sup>20</sup>

If these logical principles involving the practical ‘ought’-operator ‘ $O_{\langle A, t \rangle}$ ’ are indeed correct, then there is a natural possible-worlds semantics for this operator. First, for any possible world  $w$ , there is a set of propositions that are true in  $w$ , and causally independent of all the agent  $A$ ’s thoughts or actions at  $t$  in  $w$ . Let us call the worlds at which all these propositions are true the worlds that are “available” to  $A$  at  $t$  in  $w$ . Then there is some selection function that picks out a subset of these “available” worlds; let us say that it picks out the “favoured” available worlds. It is a constraint on this selection function that the set of “favoured” available worlds must be a realizable proposition (in the sense defined earlier). Then we can say that for any proposition  $p$ , ‘ $O_{\langle A, t \rangle}(p)$ ’ is true in  $w$  if and only if  $p$  is true at all these favoured available worlds. This possible-worlds semantics leads to standard deontic logic under the assumption that the set of favoured available worlds is never empty.

In effect, this possible-worlds semantics corresponds fairly closely to the account that was proposed by Fred Feldman (1986).<sup>21</sup> The main difference is that instead of speaking of the “favoured” available worlds, Feldman speaks of the “best” available worlds. But nothing that our discussion has covered so far justifies the claim that the “favoured” worlds are in any sense the “best” worlds.<sup>22</sup> Hence I have used a more non-committal term in characterizing the relevant selection function simply as a “favouring” function. (We should also note that the relevant selection function is itself indexed to the relevant agent  $A$  and time  $t$ ; so this semantics is compatible with rejecting a consequentialist moral theory in favour of a more

agent-relative, deontological theory. For example, it may be that a world in which *A* fails to prevent two murders at *t* is “favoured”, while a world in which there are fewer murders overall but *A* himself commits a murder at *t* is not “favoured” in the relevant way.)

I have argued that the logic for the practical ‘ought’ is nothing other than standard deontic logic. Many objections have been raised against standard deontic logic over the years. First, there is the paradox of Ross (1941, p. 62): in standard deontic logic, ‘ $O_{\langle A, t \rangle}(p)$ ’ entails ‘ $O_{\langle A, t \rangle}(p \vee q)$ ’; so ‘You ought to post this letter’ entails ‘You ought to: either post this letter or burn it’. But it seems to me that if we bear in mind that this entailment holds only if ‘or’ has its truth-functional sense, then it is clear that the statement ‘You ought to post this letter or burn it’ is actually true. There is an obvious Gricean explanation for why it seems an odd thing to say: it is much less informative than something else that one might say — namely, ‘You ought to post this letter’. Asserting the weaker claim would tend to be a useful contribution to a conversation only if one was not in a position to assert the stronger claim — that is, only if it is not true either that you ought to post the letter, or that you ought to burn it, but only that you ought to do one or other of these things. Thus it is easy to explain why ‘You ought to either post the letter or burn it’ may seem false even if it is actually true.<sup>23</sup>

A second alleged paradox of deontic logic focuses on the more general point that in standard deontic logic, if *p* entails *q* then ‘ $O_{\langle A, t \rangle}(p)$ ’ entails ‘ $O_{\langle A, t \rangle}(q)$ ’. So for example in the Good Samaritan paradox of Prior (1958, p. 144), ‘You ought to help the traveller who was beaten and robbed’ entails ‘There ought to be a traveller who was beaten and robbed’.

However, once we remember that we are dealing with an ‘ought’-operator that is indexed to an agent and a time, it becomes clear that the conclusion ‘It ought to be that the traveller was beaten and robbed’ only follows if the occurrence of ‘ought’ in the conclusion has the *same* sense, and is indexed to the *same* agent and time, as in the premise. Presumably the premise

is only true when indexed to a time  $t$  such that the fact that traveller has been beaten and robbed is causally quite independent of everything that the relevant agent thinks or does at  $t$ . But as I argued earlier, there is no natural way in English of expressing the proposition that results from attaching a practical ‘ought’-operator that is indexed to a particular agent  $A$  and time  $t$  to an embedded proposition whose truth value is causally independent of all  $A$ ’s thoughts and actions at  $t$ . We simply have no intuitions about the sentence ‘From the standpoint of you now (when there is absolutely nothing that you can do that will change the fact that the traveller was beaten and robbed), it ought to be the case that the traveller was beaten and robbed’. When this sentence strikes us as false, that is because we are not hearing it as involving a practical ‘ought’ that is genuinely indexed to that agent and that time. Instead, we may be hearing it as equivalent to ‘From the standpoint of you and some time at which there *was* something that you could do that would determine whether or not the traveller was beaten and robbed, it ought to be that the traveller was beaten and robbed’ (that is, roughly, ‘You ought to have seen to it that the traveller was beaten and robbed’). But my account of the logic of the agent- and time-indexed practical ‘ought’ certainly does not imply that *this* follows from the original premise. Thus, when the conclusion of this inference strikes us as false, that is because we are sliding between the original practical ‘ought’, which was indexed to a particular agent and time, and *another* ‘ought’, which differs either in not being a practical or deliberative ‘ought’, or else in not being indexed to the same agent and time. For these reasons, then, it seems to me that these objections to standard deontic logic are not compelling.<sup>24</sup>

## 5. The context-sensitivity of ‘ought’

So far, I have only given an account of one kind of ‘ought’ — the practical or deliberative ‘ought’. But there is extensive linguistic evidence that there are in fact several different kinds of ‘ought’: the term ‘ought’ expresses different concepts in different contexts of use.

I have already cited the distinction between the practical ‘ought’ and what Sidgwick called the “political ‘ought’”. The most striking difference between these two kinds of ‘ought’, as I have suggested, seems to be this: the practical ‘ought’ is clearly indexed to a particular agent and time, and it is a constraint on what “ought” to be the case, in this sense, that it should be realizable by what the agent thinks or does at that time; the political ‘ought’, on the other hand, is not indexed to any particular agent and time in this way. I might say, ‘The British constitution ought to be radically reformed’, without having any particular agent  $x$  in mind (either individual or collective) such that I mean to say that  $x$  ought to bring it about that the British constitution is radically reformed. In that case, as I argued earlier, my statement does not contain any implicit reference to any particular agent. My acceptance of this statement hardly commits me to *planning* on the radical reform of the British constitution; at most it commits me to *favouring the goal* of such radical reform.

‘Ought’ exhibits other sorts of contextual variation as well. For example, on some occasions, ‘ought’ seems to be relative to a particular goal or purpose. Thus, someone might say, pointing to someone who is fiddling with a safe, ‘He ought to use a Phillips screwdriver to open that safe’ or even just ‘He ought to use a Phillips screwdriver’.<sup>25</sup> Intuitively, this statement is true just in case using a Phillips screwdriver is necessary for opening the safe in the best or most effective way — even if, in many other salient senses of the term, the person ought not to be opening the safe at all. On other occasions, on the other hand, ‘ought’ is not

relative to a particular goal or purpose in this way. Thus, in saying that the person in question ought not to be opening the safe at all, one is not simply saying that the person's refraining from opening the safe is necessary for achieving some particular goal or purpose in the best or most effective way.

Another crucial dimension of context-sensitivity is seen in the fact that on some occasions, 'ought' seems to be relative to the information that is actually available to the relevant agent, whereas on other occasions it is not. Sometimes, it might be true for us to say, 'Given how little we know about what will happen, we ought to play safe'; here what we "ought" to do depends only on the information available to the agent. But on other occasions, 'ought' is not relative to the information available to the agent in this way: thus, it might sometimes be true to say 'It turned out that I ought not to have done that, although I couldn't have known it at the time'.

There are yet other examples of context-sensitivity in 'ought'. For example, there is the epistemic 'ought', as in 'Tonight's performance ought to be a lot of fun', which seems to mean, roughly, just that it is highly *probable* that tonight's performance will be a lot of fun.

I shall argue that this contextual variation in the concept that the term 'ought' expresses is not mere random ambiguity (like the way in which 'bank' in current English is ambiguous between *river bank* and *money bank*). Rather, the term 'ought' is systematically context-sensitive. There are certain specific contextual parameters that are fixed by the context of a statement involving the term 'ought'; and these contextual parameters determine which of these many 'ought'-concepts the term 'ought' expresses in the context.

My account of the meaning of the practical or deliberative 'ought' was based on the idea that the essential conceptual role of this type of 'ought' is its role in *practical reasoning*. There is a natural way of generalizing this approach so that it can cover other kinds of

‘ought’ as well. In the widest sense, *deliberation* involves considering a certain domain of propositions, against the background of a certain body of information, and then making a certain assessment of those propositions.

In the kind of deliberation that I focused on in my account of the practical ‘ought’, the domain of propositions consists of those propositions that are compatible with all the truths that are causally independent of everything that one thinks or does at the relevant time; and these causally independent truths form the background against which one assesses the propositions that are compatible with them. The distinctive sort of assessment that forms the output of this kind of deliberation is *incorporating* some of these propositions into one’s *plans* about what to do at the relevant time.

The essential conceptual role of other kinds of ‘ought’ is their role in other kinds of deliberation. For the political ‘ought’, the relevant domain of propositions is a wider domain (not just those propositions that are compatible with everything that is causally independent of what a particular agent thinks or does at a particular time): roughly, it is the domain of propositions that are compatible with those features of the actual world that could not easily be otherwise — the features that hold in all the possible worlds that are “nearby” the actual world, such as the laws of nature. The kind of assessment that forms the output of this kind of reasoning is not incorporating any of these propositions into one’s actual plans, but only forming a *preference* for some of these propositions over the alternatives that are incompatible with them. To form a preference for a proposition over the relevant alternatives is in effect to form a *conditional plan* — in effect, the plan of acting in such a way that the proposition in question is true, rather than in such a way that the relevant alternative is true, if one does either.

The essential conceptual role of the purpose-relative ‘ought’ (as in ‘He ought to use a

Phillips screwdriver to open that safe’) is its role in a kind of *purpose-relative practical reasoning*. In this kind of practical reasoning, one reasons merely about how to achieve a certain purpose, ignoring the question of whether or not to pursue that purpose in the first place. The relevant domain of propositions is, as with the practical ‘ought’, the propositions that are compatible with everything that is causally independent of what the relevant agent thinks or does at the relevant time. The difference lies with the kind of assessment that forms the output of this reasoning. This is not incorporating the relevant propositions simply into one’s plans about what to do at the relevant time, but incorporating those propositions into one’s *contingency plans* about how (if at all) to achieve the purpose in question. In effect, it is to plan on acting in such a way that the proposition in question is true in the event that one plans on achieving the purpose in question.

In general, the semantic value of each of these kinds of ‘ought’ will be the property of a proposition that makes it uniquely correct to assess the proposition in the relevant way, out of the domain of propositions that are compatible with the relevant background information. So, for example, according to this account, the statement ‘He ought to use a Phillips screwdriver to open that safe’ will be true just in case the proposition that the person in question uses a Phillips screwdriver follows from some correct contingency plans for how (if at all) to open the safe, and the negation of that proposition does not follow from any such correct contingency plan.

It seems to me that for every one of these kinds of ‘ought’ (practical, political, and purpose-relative), there is both a version that is relative to the information that is available to the relevant agent and a version that is not information-relative in this way. For example, sometimes we might say, ‘Given that he didn’t know what sort of safe it was, he ought to have tried opening it with an ordinary screwdriver first’, whereas on other occasions we

might say, ‘He couldn’t have known it at the time, but he ought to have used a Phillips screwdriver for that safe’; and similarly with the other kinds of ‘ought’. I shall call these “information-relative” and “objective” uses of ‘ought’ respectively.

The difference between the “information-relative” and “objective” uses of ‘ought’ does not consist in the kind of deliberation in which they have their essential conceptual role, but rather in the precise role that these uses of ‘ought’ play in those kinds of deliberation. I shall illustrate the difference with respect to the practical ‘ought’; a similar difference will apply to the other kinds of deliberation as well. A belief involving the objective practical ‘ought’, of the form ‘ $O_{\langle me, t \rangle}(p)$ ’, *unconditionally* commits the believer to incorporating the proposition  $p$  into his plans; the only way in which the believer can escape this commitment is by giving up this belief. The information-relative ‘ought’, on the other hand, is relativized, at least implicitly, to a particular body of information; and the essential conceptual role of the information-relative practical ‘ought’ consists in the fact that the canonical rational ground or basis for beliefs involving this sort of ‘ought’, of the form ‘In relation to information  $I$ ,  $O_{\langle me, t \rangle}(p)$ ’, is the fact that being in information state  $I$  commits the believer to incorporating  $p$  into his plans about what to do at  $t$ .

The epistemic ‘ought’ (as in ‘Tonight’s performance ought to be a lot of fun’) seems to be a sort of information-relative ‘ought’, implicitly relative to a certain body of information that counts in the context as *evidence*. The relevant sort of deliberation here is not practical reasoning, but deliberation about what to believe; this sort of deliberation starts out from the information that counts as evidence in the context, and concludes with the thinker’s forming at least a tentative belief in one of the propositions that are compatible with that evidence. So the essential conceptual role of the epistemic ‘ought’ is that the canonical rational ground or basis for beliefs involving this sort of ‘ought’, of the form ‘In relation to

evidence  $E$ , it ought to be that  $p$ ', is the fact that evidence  $E$  commits one to forming at least a tentative belief in  $p$ .

If this account of the essential conceptual role of the information-relative 'ought' is correct, it may be plausible to say that its semantic value will just be that relation between a body of information and a proposition that makes it the case that that information really does commit the relevant agent to making the relevant sort of assessment of that proposition. Thus, the semantic value of the epistemic 'ought' will be that relation between a body of information and a proposition that makes it the case that that information commits one to forming at least a tentative *belief* in that proposition. In other words, given how I am understanding the notion of 'commitment', this is the relation that makes it the case that if having that information is itself a rational state, then it is irrational not to form at least a tentative belief in that proposition. Presumably, this relation has something to do with the proposition's *probability* on that evidence. Thus, an epistemic 'ought'-statement, of the form 'In relation to evidence  $E$ , it ought to be that  $p$ ' is true if and only if  $p$  is sufficiently probable given evidence  $E$ .

In the previous section, I argued that the logic of the practical 'ought' reflects the consistency constraints that apply to correct planning. In a broadly similar way, the logic of each of these other kinds of 'ought' reflects the consistency constraints that apply to the relevant kind of assessment. (In the case of the information-relative 'ought', these will be consistency constraints on *rational* assessments of the relevant kind; in the case of the objective 'ought', they will be consistency constraints on *correct* assessments of the relevant kind.)

According to the suggestions that I have made here, the relevant kind of assessment (at least in the case of the kinds of 'ought' that I have considered here) involves incorporating

the proposition in question into some sort of (conditional) plans — or, in the case of the epistemic ‘ought’, into one’s system of beliefs. It seems plausible to me that essentially the same consistency constraints apply to conditional plans and to belief systems as to unconditional plans. First, for a conditional plan to be correct, the conditional plan must be logically consistent; and likewise, for a system of beliefs to be correct, the contents of the system must be logically consistent. Secondly, for a conditional plan or a system of beliefs to be correct, it must be possible to extend it into a maximally detailed plan or system of beliefs which is also itself correct. Finally, it will always be correct to incorporate a logical truth to any plan or system of beliefs, and never correct to incorporate the negation of a logical truth. Just like the practical ‘ought’, then, these other kinds of ‘ought’ are subject to all the consistency constraints of standard deontic logic. It may also be plausible that there are similar consistency constraints on *rational* conditional plans and on *rational* beliefs. If so, then it is plausible that the informative-relative ‘ought’ is also subject to the consistency constraints of deontic logic.

We can capture these logical features of these sorts of ‘ought’ by means of a generalized version of the possible-worlds semantics that I sketched in the previous section for the practical ‘ought’. As we have seen, the context must determine two parameters for each occurrence of ‘ought’. First, the context must determine the conceptual role of the concept that this occurrence of ‘ought’ expresses. Determining this will involve settling the following two issues: (i) whether it is the sort of conceptual role that is characteristic of the objective ‘ought’, or the sort that is characteristic of the information-relative ‘ought’; and (ii) what kind of deliberation figures in this conceptual role — that is, what kind of assessment of propositions is the output of this sort of deliberation (for example, this output might be incorporating the proposition into one’s plans, or into one’s contingency plans, or into one’s

system of beliefs). Secondly, the context must determine “the relevant domain of propositions” and the relevant background information; this information can be represented by means of a set of propositions  $S$ , which is “held fixed” in the context, so that only those propositions that are consistent with  $S$  count as “the relevant domain of propositions” in the context. (For the objective ‘ought’, the set of propositions that is “held fixed” will typically be some set of truths that need not be known or believed by any of the participants to the relevant conversation, such as all the truths that are causally independent of what the relevant agent thinks or does at the relevant time. For the information-relative ‘ought’, the set of propositions that is “held fixed” will typically be some set of propositions that are known or believed by the participants in the conversation.)

So, in a context in which a set of propositions  $S$  is being “held fixed”, and ‘ought’ expresses a concept with essential conceptual role  $C$ , ‘It ought to be the case that  $p$ ’ is true at a world  $w$  if, and only if,  $p$  is true in all possible worlds that (i) are compatible with all members of  $S$  and (ii) belong to the “favoured” subset of those worlds (from the standpoint of  $w$ ) according to the relevant selection function that is associated with  $C$ .<sup>26</sup> As before, this account of the semantics leads to standard deontic logic so long as the “favoured” subset of the worlds that are compatible with  $S$  is never empty.

My account of the objective practical ‘ought’ can be seen as an instance of this general pattern. According to my account, a statement involving the practical ‘ought’, of the form ‘ $O_{\langle A, t \rangle}(p)$ ’, is true if and only if  $p$  is true in all worlds that (i) are compatible with all the propositions that are true in  $w$ , and causally independent of what  $A$  thinks or does at  $t$ , and (ii) belong to the “favoured” subset of those worlds, when assessed in the appropriate way with respect to how  $A$  acts at  $t$  in those worlds.

Similar accounts can be given of the other kinds of ‘ought’, including the epistemic

‘ought’ (as in ‘Tonight’s performance ought to be a lot of fun’). A statement involving the epistemic ‘ought’, of the form ‘It ought to be the case that  $p$ ’, is true at a world  $w$  if, and only if,  $p$  is true in all worlds that (i) are compatible with what *counts as evidence in the context*, and (ii) belong to the “favoured” subset of those worlds when evaluated with respect to *probability on the evidence* from the standpoint of  $w$ .

Often, the set of propositions  $S$  that is “held fixed”, and so determines which domain of propositions (or possible worlds) is relevant to an ‘ought’-statement, is just determined implicitly by the context. In some cases, however, it may be indicated more explicitly. To take an example involving the practical ‘ought’, one may say: ‘If you are going to keep on taking heroin intravenously, you at least ought to use clean needles’. Here the proposition ‘You are going to keep on taking heroin intravenously’ is explicitly added to the set of propositions  $S$  that is “held fixed”, producing a set that is different from the set that would ordinarily be “held fixed” for this sort of ‘ought’. In effect, this is a *conditional* ‘ought’ of the sort that was analysed by David Lewis (1974b) among others. Thus, this statement is true just in case all members of the “favoured subset” of the worlds in which the addressee keeps on taking heroin intravenously (and in which all the other truths that are causally independent of what the addressee does or thinks at the relevant time also continue to hold) are also worlds in which he uses clean needles. So far as I can see, there is a conditional ‘ought’ of this sort corresponding to every one of the various kinds of ‘ought’ that I have discussed above.

The general picture of ‘ought’ as a kind of modal operator, quantifying over certain possible worlds, is familiar. What my conceptual role semantics approach adds to this familiar picture is an understanding of what selection function yields the relevant “favoured” worlds (as I have called them). There are in fact many such selection functions, each corresponding to a different concept that can be expressed by ‘ought’. What these selection

functions have in common is this: for each of these selection functions, there is a certain way of “assessing” propositions that forms the output of some kind of “deliberation”, such that the propositions that are true at all the worlds that are “favoured” according to this selection function are all propositions that it is uniquely correct (in the case of an objective ‘ought’) or uniquely rational in relation to the relevant information (in the case of an information-relative ‘ought’) to assess in that way.

According to the account that I have outlined, the logical principles that apply to each ‘ought’-concept stem from the consistency constraints on the kind of deliberation within which that ‘ought’-concept has its essential conceptual role. The reason why the principles of standard deontic logic are correct for each of the ‘ought’-concepts that I have discussed so far is that each of these concepts has its essential conceptual role within a kind of deliberation the output of which consists in incorporating some proposition into some sort of system of plans or beliefs. It seems essential to any system of plans and beliefs that to be correct, or even to be rational, its contents must all be consistent with each other. Since plans and beliefs are subject to fairly robust consistency constraints, so too are these ‘ought’-concepts.

There may be yet other concepts, similar to the ‘ought’-concepts that I have discussed so far, that have their essential conceptual role in some other kind of deliberation to which these consistency constraints do not apply. For example, perhaps there is a kind of deliberation or reasoning the output of which is a *desire*; and perhaps there need be nothing incorrect about simultaneously desiring both  $p$  and the negation of  $p$ . There might then be a concept whose essential conceptual role is to play a regulative role in this sort of reasoning; and there would be no reason to expect standard deontic logic to hold for such concepts. It may even be that the word ‘ought’ in English can express such a concept. (Philosophers who insist on the possibility of “moral dilemmas” — situations in which it ought to be that  $p$  is the

case, and also ought to be that  $p$  is not the case — would insist that ‘ought’ can express a concept of this kind.) Unfortunately, I cannot undertake the empirical investigations that would be necessary in order to determine whether the English ‘ought’ can express any such concept.

To conclude: it appears that my conceptual role semantics for the term ‘ought’ — according to which the basic meaning-constituting conceptual role of ‘ought’ is its role in deliberation — can explain many of the phenomena that such an account is called upon to explain. It can explain the precise ways in which ‘ought’ is systematically context-sensitive; it can provide an explanation of why the principles of standard deontic logic are correct for each of the many concepts that can be expressed by ‘ought’; and it enables us to answer the objections that have been raised against that standard deontic logic.<sup>27</sup>

## Notes

1. I avoid the term ‘expressivism’ here because an “expressivist” semantics for a class of statements — that is, a semantics that gives its fundamental explanation of the meaning of these statements in terms of the type of mental state that they express — is only one possible form that a non-factualist semantics of these statements could take.
2. In effect, I shall be assuming something like the ontological framework outlined in the first four chapters of Bealer (1982).
3. For my first attempt at this sort of conceptual role semantics, see Wedgwood (2001). Another philosopher who has developed a form of “conceptual role semantics” for normative vocabulary — according to which, as for my account, the essential conceptual role of normative vocabulary is its role in *practical reasoning* — is Robert Brandom (1994, pp. 229–71, and 2000, pp. 79–94). Nonetheless, there are profound differences between Brandom’s approach and mine. (1) I do not aim to give a reductive account of semantic or intentional notions in general: I simply *presuppose* that we are dealing with a term that expresses some concept or other; I aim only to explain what it is about the term that makes it the case that it has *this* particular meaning, and *this* particular property as its semantic value. (2) I do not take conceptual role semantics to be a *rival* to truth-conditional semantics: on the contrary, I assume a rich ontological framework of propositions, properties and relations, and I take it to be an essential feature of the meaning of a term that it has some semantic value that is included within this ontology. Indeed, in my view, the “external” norm of correctness — which in the case of belief is a norm of *truth* — is more fundamental than any “internal” norm of rational inference or reasoning (after all, what is the *point* of rational inference or reasoning, if not to arrive at the truth in one’s beliefs?). (3) I reject Brandom’s radical holism; in my view it is not the *total* conceptual role of ‘ought’ that fixes its meaning, but only a special privileged part of its conceptual role.
4. Compare also Harman (1973).
5. In many languages, the closest equivalent to ‘ought’ is an impersonal verb followed by a noun clause, which is a construction that it is particularly tempting to interpret as representing a proposition embedded inside a propositional operator: *il faut* in French, *dei* and *chrē* in ancient Greek, *prepei* in modern Greek, *rhaid* in Welsh, *oportet* in Latin, and so on.
6. See Sidgwick (1907, Book I, ch. 3, n. 10, p. 34). Sidgwick illustrates this “political *ought*” by means of the following example (p. 33): “when I judge that the laws and constitution of my country ‘ought to be’ other than they are, I do not of course imply that my own or any other individual’s single volition can directly bring about the change.”
7. Some philosophers believe that we must distinguish between “the time of the act” and “the time of the ‘ought’”. I think this is wrong. In my view, there is no “time of the ‘ought’”; at most, the fact that makes the ‘ought’-statement true may be a fact about some particular time, such as the fact that one made a certain promise at a certain time. However, the proposition embedded inside the time-indexed ‘ought’-operator may itself concern a different time from that to which the operator is indexed. For example, an adviser might say to you, ‘Your

nephew ought to inherit your property after you die'; in this case, 'ought' is indexed to you and the time at which you have the ability to draw up your will, not to the time after you die when your nephew will inherit.

8. To avoid certain complications, let us suppose that this symbol has no content unless 'A' refers to someone who is an agent at the time referred to by 't'. I should note that I am being rather free and easy with the use of quotation marks, which sometimes form expressions that refer to linguistic types, sometimes to propositions, and often function as Quinean corner-quotes. I hope that no serious confusions will result.

9. Even 'At t, A ought to be such that p' does not really convey ' $O_{\langle A, t \rangle}(p)$ ', but rather ' $O_{\langle A, t \rangle}(A \text{ is such that } p)$ '. 'A is such that p' is not strictly speaking the same proposition as p itself: the former entails that A exists, while the latter may not.

10. See Aristotle, *Nicomachean Ethics* III.3, 1112<sup>a</sup>18-30.

11. For an argument for the claim that this is the best way for a realist about the normative to explain such "normative judgment internalism", see Wedgwood (2004).

12. This is my response to the principal objection that was made against my approach by Schroeter and Schroeter (2003): they overlook the fact that I have a way to distinguish such rules of "commitment" from other rules of reasoning.

13. For more on this sense of 'correctness', see Wedgwood (2002).

14. The idea of such "radical interpretation" is due to Davidson (2001, Essay 9). We could appeal to this idea without accepting Davidson's full-blown "interpretivism". As Lewis (1974a) suggests, the reference to interpretation could just be taken as a way of dramatizing what is objectively constitutive of a word's having the meaning in question.

15. For a useful account of the various sorts of non-normal modal operators, see Schurz (1997, p. 160f.).

16. The claim that 'ought' distributes over conjunction has been disputed. E.g., Jackson (1985) has proposed analysing ' $O(p)$ ' in counterfactual terms, as meaning, roughly, 'If it were the case that p, things would be better than they would be if it were not the case that p'. This analysis allows for counterexamples to distributivity. Suppose that (i) the nearest possible world in which p is true is one in which q is not, and (ii) such worlds are very bad, although worlds in which both p and q are true are very good. Then given Jackson's analysis, ' $O(p \ \& \ q)$ ' is true, but ' $O(p)$ ' is false. But it seems to me that 'ought' is not well analysed in such counterfactual terms. We often say that something "ought" to be the case when it is very much only a *part* of everything that ought to be the case.

17. This claim might be thought to conflict with the claim of some philosophers that (i) deontic logic can be used to understand the logical structure of *legal* codes, and (ii) there are "gappy" legal codes, according to which certain courses of action are neither permitted nor forbidden. However, there is no conflict, at least in my view, since the concept of what is "legally required" is not a kind of 'ought'; the logic of legal codes is not a sort of deontic logic.

18. If ' $O_{\langle A, t \rangle}$ ' and ' $P_{\langle A, t \rangle}$ ' are duals of each other, and for ' $O_{\langle A, t \rangle}(q)$ ' to be true, the embedded proposition  $q$  must be realizable, then the natural conclusion to draw is that for ' $P_{\langle A, t \rangle}(p)$ ' to be true,  $p$  must be, as we might put it, at least *practically possible*:  $A$  must have some set of abilities such that there is a possible world in which all the actual truths that are causally independent of everything that  $A$  thinks or does at  $t$  hold,  $A$  exercises those abilities at  $t$ , and  $p$  is true.

19. This may also give us a reason for accepting the S4 principle for the deontic operator: ' $O(p) \rightarrow OO(p)$ '. There are several other principles that have been suggested as part of the logic of 'ought' that would also have to be considered in a fuller treatment of this topic — for example, ' $O(O(p) \rightarrow p)$ ', ' $O(p \rightarrow OP(p))$ ', and ' $P(p) \rightarrow OP(p)$ '. For a thorough list, see Åqvist (1984). Unfortunately, I will not be able to consider whether these principles are genuinely logical truths here.

20. Various objections have been raised against the rule of necessitation in deontic logic. For example, it might seem that it makes it “too easy” to answer a radical “error-theorist” who believes that 'ought' is meaningful but all sentences in which 'ought' has largest scope are false. But the quest for a semantics for 'ought' that is neutral on absolutely all meta-ethical controversies seems misguided. Certainly, this radical sort of error theory is incompatible with the account that I have given of the meaning of 'ought'. But that only shows that a full defence of my account would have to involve an argument for regarding this radical error theory as false. It also need not follow that if my account is correct, then this radical error theorist is irrational, or that he doesn't understand the term 'ought'. It often happens that a philosopher understands a term perfectly well but embraces a false theory of what the term means.

21. Compare also Belzer (1998), Humberstone (1983), and Loewer and Belzer (1983).

22. In fact, I believe that there are further considerations that justify the claim that there is a *ranking* of worlds, such that the “favoured” worlds can be identified with the worlds that come highest in this ranking; and I also believe that the English words 'better' and 'best' express a sufficiently large number of notions that we can convey the idea that one world  $w_1$  comes higher up in this ranking than another world  $w_2$  by saying that  $w_1$  is “better” than  $w_2$ . The considerations that justify the claim that there is such a ranking of worlds have to do with the logical relations between the *conditional* 'ought'-statements 'Given that  $p_1$ , it ought to be that  $q$ ' and 'Given that  $p_1$  &  $p_2$ , it ought to be that  $q$ '. So long as these statements involve the same type of 'ought', then it is plausible that the same logical relations hold between them as between the *counterfactuals* 'If it were the case that  $p_1$ , it would be the case that  $q$ ' and 'If it were the case that  $p_1$  &  $p_2$ , it would be the case that  $q$ '. Then as Lewis (1973, pp. 58–59) has shown, these logical relations imply that any adequate possible-worlds semantics, either for the conditional 'ought' or for counterfactuals, will be equivalent to one that involves a ranking of worlds. (In the case of counterfactuals, the ranking of worlds is in terms of *closeness to what is actual*; in the case of the conditional 'ought', the ranking is in terms of *closeness to what is ideal*.) However, a long and intricate argument is needed to defend the claim that these conditional 'ought'-statements are logically related in this way; so I shall not try to defend the claim here.

23. Here is an objection to my response to Ross's paradox. My response entails that if there is anything that you ought to do, then whatever you do, you will do something that you ought to do. (If you burn the letter, you will have done something that you ought to do — viz. post the letter or burn it; similarly, if you throw the letter away, and so on.) But surely it cannot be that easy to do something that one ought to do? Reply: There are many problems with this objection (it plays very fast and loose with quantification over "things that one might do", for example). But even if my response to Ross's paradox does entail this result, the result is not obviously counterintuitive at all. On reflection, it seems clear that it *is* easy to do *something* that one ought to do: what is hard is to do *everything* that one ought to do ...

24. For this reason, I find it somewhat surprising that many recent deontic logicians (e.g. Hansson 1997, and Belzer 1998) have been persuaded by these familiar "paradoxes". I suspect that part of the reason is that these deontic logicians seem not to have seen the evidence in favour of the hypothesis that 'ought' is systematically context-sensitive, and is implicitly indexed in different contexts of use to various different parameters; hence they have been rather uncritical in relying on their linguistic intuitions, without investigating whether these intuitions in fact involve different 'ought'-operators — that is, occurrences of 'ought' that are indexed to different parameters. Admittedly, many other "paradoxes" have been raised against standard deontic logic. But according to my account, most of these (including Castañeda's (1981) "Paradox of the Second Best Plan" and Åqvist's (1967) "Paradox of the Knower") can be solved in the same way as the Good Samaritan Paradox. The main exception is Chisholm's (1963) "Paradox of the Contrary-to-Duty Imperative". The most promising solution to this paradox is the familiar solution in terms of the *conditional* 'ought'; see Feldman (1990).

25. I take this example from Williams (2002). Compare Prichard's (1949, p. 91) discussion of the 'ought' that is "hypothetical" on the agent's intentions.

26. As Kratzer (2001) put it, 'ought'-statements involve two contextually determined parameters: (i) the "modal base" (which delimits the relevant class of worlds), and (ii) the "ordering source" (which supplies a ranking of the worlds and thereby a "favoured" subset of the relevant worlds).

27. I am indebted to audiences at the University of Wisconsin, Madison, and at the University of Glasgow, and to my Oxford colleagues John Broome, Krister Bykvist, and Timothy Williamson, for penetrating comments on earlier drafts. The final revisions to this paper were carried out while I held a Research Leave award from the UK Arts and Humanities Research Board, to whom I should also like to express my gratitude.

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