NORMATIVE REQUIREMENTS¹ John Broome, University of Oxford *Ratio*, 12 (1999), pp. 398–419, and in *Normativity*, edited by Jonathan Dancy, Blackwell, 2000, pp. 78–99.

Abstract

Normative requirements are often overlooked, but they are central features of the normative world. Rationality is often thought to consist in acting for reasons, but following normative requirements is also a major part of rationality. In particular, correct reasoning – both theoretical and practical – is governed by normative requirements rather than by reasons. This article explains the nature of normative requirements, and gives examples of their importance. It also describes mistakes that philosophers have made as a result of confusing normative requirements with reasons.

1. Introduction

Our most familiar normative concepts are 'ought' and 'a reason'. Most of the philosophical discussion of normativity revolves around these two. But there is another that is equally fundamental. I call it 'normative requirement'. It is not so familiar, and is often confused with the other two. This paper describes normative requirements, and shows what an important feature of normativity they are.

A normative requirement is a relation: one thing normatively requires another. Sections 2 and 3 distinguish various normative relations in a formal way, in order to separate the relation of normative requirement from others. Sections 4, 5 and 6 set out some examples of normative requirements. The one in section 6 comes from the context of practical reasoning, and practical reasoning forms the main context for the rest of the paper. Section 7 explains how normative requirements are easily confused with reasons, but the rest of the paper demonstrates how important it is to distinguish the two. Section 8 shows how very differently they behave when there are conflicts. Sections 9, 10 and 11 describe three mistakes that have been made by philosophers as a result of ignoring the existence of normative requirements. They all constitute misunderstandings of the nature of practical reasoning. Recognizing each of them helps to illuminate the working of normative requirements, and to show their importance.

2. Types of normative relation: detaching relations

No doubt there are some things you ought to do, ought to believe, ought to want, and so on. To accommodate all these cases, I shall take 'you ought' to govern a proposition. Grammatically, 'ought' takes an infinitive rather than a noun clause, but an infinitive, like a noun clause, may denote a proposition. The subject is implicit; it is normally the subject of the governing verb. 'I hope to see the Pacific' means the same as 'I hope that I see the Pacific'. Similarly, 'You ought to relax' would mean the same as 'You ought that you relax', if only grammar would permit this latter sentence. 'You ought' governs the proposition that you relax. I shall formally represent 'you ought' by a propositional operator 'O'; I shall write

 $\mathbf{O}q$,

where q is a proposition.

'O' cannot be comfortably translated into English. Whenever I can, I shall render 'Oq' as 'You ought to q'. This expression sounds strange because we are used to denoting propositions by sentences, which become noun clauses when they occupy a subordinate position. But as I say, an infinitive in a subordinate position can also denote a proposition. So 'You ought to q' is arguably grammatical. However, it fails as a rendering when 'O' governs a complex proposition, or when I need to quantify over propositions. Then, in desperation, I shall have to adopt the unsatisfactory 'You ought to see to it that q'. I use 'to see to it' as mere grammatical padding, which allows a noun clause to plug into an 'ought'. In common usage, 'You ought to believe in God' differs in meaning from 'You ought to see to it that you believe in God'. But as I use 'to see to it', these sentences have the same meaning. So do the sentences 'You ought not to see to it that q' and 'You ought to see to it that not q'.

What you ought to see to is often supposed to be determined by a balance of considerations, which may conflict. For example, there may be some considerations in favour of believing the suspect is guilty, and some against. To cover cases like this, we say you *have a reason* to believe she is guilty. This is consistent with your also having a reason not to believe it. A reason, in this sense, is *pro tanto*. In this paper I shall only use 'a reason' in this sense. I shall write:

Rq

and translate it 'You have a reason to q'. If you have a reason to q and no reason not to q, then you ought to q.

If you have a reason to q, some fact or other constitutes your reason. This fact is a reason for you to q, and makes it the case that you have a reason to q. Let p be the proposition that this fact obtains. Slightly inaccurately, I shall say that the proposition p (rather than the fact) is a reason for you to q, and that p gives you a reason to q. A plausible example is: that you are thirsty is a reason for you to drink water.

If p is a reason for you to q, a particular normative relation holds between the propositions p and q: the relation of being a reason to. I shall write

p reasons q,

meaning 'p is a reason for you to q'. If this relation holds, one consequence is that $p \rightarrow Rq$,

where \rightarrow is the material conditional.

(2) is a consequence of (1), but not equivalent to (1). Because (2) is only a material conditional, it can be true even if p is not a reason for you to q; for instance, it is true whenever p is false. (1) says that, if p, you have a reason to q, and furthermore, you have a reason because of p. We could say that (1) is (2) with *determination* added, from left to right. I shall not try to analyse this idea of determination, but leave it intuitive. It is roughly analogous to causation. I shall call (1) a 'determining relation' and call (2) the 'logical factor' of (1).

An important feature of the reasons relation follows from (2). A material conditional allows its consequent to be detached by modus ponens. If p reasons q, (2) tells us that, if p is the case, you have a reason to q. If you are thirsty, you have a reason to drink water.

If you have a reason to q, there is some fact that makes this the case. Similarly, if you ought to q, there is some fact that makes this the case, too. Let p be the proposition that this fact obtains. Then a different normative relation holds between p and q. I shall write

p oughts q, (3) meaning 'p makes it the case that you ought to q'. If this relation holds, one consequence is that

 $p \rightarrow Oq.$ (4) is a consequence of (3), but not equivalent to (3). (3) is (4) with determination added, from left to right. (4) is the logical factor of the determining relation (3).

The consequent in (4) is detachable like the consequent in (2). So, given (3), if p is the case, you ought to q.

(1)

(2)

(4)

The difference between the oughts relation (3) and the reasons relation (1) might be put like this: the former makes a strict demand on you; the latter a slack one. Suppose p is true but q is not. Then if the oughts relation holds, you are definitely failing to see to something you ought to see to. You ought to see to it that q, and you do not. On the other hand, if only the reasons relation holds, you may be failing to see to nothing you ought to see to. You have a reason to see to it that q, but you may also have a better reason not to see to it that q, and in that case you are doing nothing wrong if you do not see to it.

The oughts relation and the reasons relation are two sorts of normative relation that may hold between two propositions p and q. Both permit a normative conclusion to be detached, if p is the case. One permits Rq to be detached, the other Oq.

3. Types of normative relations: non-detaching relations

Other normative relations may hold between propositions. In this paper, I shall be particularly concerned with one I call 'normative requirement'.² I shall write

p requires q (5)and translate it as 'p normatively requires you to q'. If this relation holds, one consequence is that

$$O(p \rightarrow q)$$
 (6)

you ought to see to it that, if p is true, so is q.

(6) is a consequence of (5), but not equivalent to (5). Because (6) contains only a material conditional, it may be true even if p does not normatively require you to q. For example, suppose you ought to clean your teeth:

O(You clean your teeth).

Logical equivalents can surely be substituted within the scope of 'O'. So it follows that:

O(Grass is red or grass is not red \rightarrow You clean your teeth).

But plainly the tautology that grass is red or grass is not red does not require you to clean your teeth; it is irrelevant to that. (5) says you ought to see to it that, if p, then q, and furthermore, it is p that requires you to q. Once again, (5) is (6) with determination added, from left to right. (6) is the logical factor of the determining relation (5).

From (6), neither of the material conditionals (2) or (4) follows. Consequently, neither follows from (5) either. Whatever the nature of the determination (5) adds to (6), it is plainly not a material conditional like (2) or (4). Consequently, a normative requirement does not permit a normative conclusion to be detached by modus ponens. To put it more graphically, in (5) normativity is attached to the relation between the propositions p and q, whereas in (1) and (3), which permit detachment, the normativity is attached to the consequent q.

For my purposes, the essential features of the normative requirement (5) are, first, that it implies (6) and, second, that it does not imply (2) or (4). Beyond those two features, I shall deliberately leave the concept of a normative requirement as open and intuitive as possible. (I shall say a little more about its logic in section 8.) In sections 4, 5 and 6, I shall give examples to demonstrate that normative requirements are important in practice. However we may try to systematize normativity, we shall always need to give a place to normative requirements. Consequently, I do not want to tie them down to any particular deontic system or account of normativity.³

For completeness, I need to mention a fourth normative relation, which I shall call 'normative recommending'. I shall write

p recommends q

to mean that p normatively recommends you to q. If this relation holds, one consequence is

5)

(7)

that

you

$$R(p \rightarrow q)$$
; (
have a reason to see to it that, if p is true, so is q. (8) is the logical factor of the

determining relation (7). (7) does not imply either (2) or (4); it does not permit a normative conclusion to be detached by modus ponens.

The difference between the relation of normative requirement (5) and the relation of normative recommending (7) is that the former makes a strict demand on you and the latter a slack one. Suppose p is true but q is not. Then if the requirement relation holds, you are definitely failing to see to something you ought to see to. (6) tells us you ought to see to it that if p is true so is q, and you do not see to it. On the other hand, if only the recommending relation holds, you may be failing to see to nothing you ought to see to. (8) tells us you have a reason to see to it that if p is true so is q, but you may have a better reason not to see to this, and in that case you are doing nothing wrong if you do not see to it.

To summarize, the normative relations I have mentioned can be classified by the two criteria of detachment and strictness:

	Strict	Slack
Detaching	$p \text{ oughts } q$ $p \to \mathbf{O}q$	$p \text{ reasons } q$ $p \to \mathbf{R}q$
Non-detaching	$p \text{ requires } q$ $O(p \rightarrow q)$	p recommends q $R(p \rightarrow q)$

In each box of this table, I have put a determining relation together with its logical factor.

4. First example: believing you ought

This section and the next two give examples of normative requirements. The first example is the relation that holds between believing you ought to see to something and seeing to it.⁴ Clearly some sort of normative relation holds between these things, but what is this relation exactly?

Is it that your believing you ought to see to something makes it the case that you ought to see to it? I shall write'B' for 'you believe that'. Should we say:

BO*r* oughts *r* ?

Certainly not; your belief cannot make itself true.

So instead, is the relation: BOr reasons r ?

(9)

This too is wrong. Notice first that it is not very plausible. Suppose you ought not to r, and you ought not to believe you ought to r, but you do in fact believe you ought to r. Then it is not very plausible that you have any reason to r, just because of a false belief you ought not to have. Besides this implausibility, I have two arguments against (9), which seem to me conclusive.

First, suppose (9) was true, and suppose you believe you ought to r. Then you would have a reason to r. So if you had no contrary reason not to r, it would be the case that you ought to r. Therefore, in the special case where you have no contrary reason, your belief would make it the case that you ought to r. But your belief cannot make itself true even in this special case. So (9) cannot be true.

Second, (9) expresses a slack relation, whereas the relation between believing you ought to see to something and seeing to it must actually be strict. If you believe you ought to see to it

(8)

that r, but you do not see to it, you are definitely failing in one respect. You are definitely not entirely as you ought to be. But if the relation between believing you ought to see to it that rand seeing to it that r was (9), you would not necessarily be failing at all. You might be perfectly as you ought to be. It might be that, though you have a reason to see to it that r, you have a better reason not to see to it that r. Then you are right not to do so.

So the relation we are after is neither the oughts nor the reasons relation. It must be the relation of normative requirement:

BOr requires r.

The second argument I gave exemplifies a very useful test for distinguishing a normative requirement from a reason. The reasons relation is slack, so if a normative relation is strict (and it is not the oughts relation) it must be normative requirement. I shall call this the 'strictness test'. (9) may seem attractive at first; you might think 'Surely my believing I ought to r gives me *some* reason to r'. But once you see the connection is strict, you should be better satisfied by (10) than by (9).

5. Second example: theoretical reasoning

The examples of normative requirement I am most concerned with come from the context of reasoning. I shall start with theoretical reasoning. Suppose a proposition q follows from a proposition p by a valid inference. That is to say:

 $p \vdash q$.

Now suppose you believe p. Then a process of correct reasoning will bring you to believe q. (Assume the inference is immediate; I am not concerned with cases where you might reasonably fail to make an inference because it is difficult.) However, it is not necessarily the case that you ought to believe q, nor that you have a reason to believe q. For example, suppose you ought not to believe p, though you do. Then it plainly may not be the case that you ought to believe q or that you have a reason to believe q. So we cannot say either that:

Bp oughts Bq

or that Bp reasons Bq.

To reinforce this point, remember that p itself is a consequence of p. A belief in p is plainly not self-justifying, so it cannot be that either:

Bp oughts Bp

or Bp reasons Bp.

Furthermore, we can apply the strictness test to rule out the reasons relation (11). The relation between believing p and believing q is strict. If you believe p but not q, you are definitely not entirely as you ought to be. But (11) expresses a slack relation; according to (11) you might believe p and not believe q, and yet be entirely as you ought to be, because you may have a stronger reasons not to believe q. This is not possible. To be sure, you might have a good reason not to believe q, and an appropriate response might be to stop believing p. That way, you can escape from the requirement that is imposed on you by your believing p. But if you do believe p and yet do not believe q, you are not entirely as you ought to be. So the relation is strict, which means it cannot be the reasons relation.

The upshot is that the relation between believing something and believing its consequence is another normative requirement:

Bp requires Bq.

(12)

(11)

It is tempting to say: surely your belief in p gives you *some* reason to believe q. By now we see the relation is strict, this temptation should be better satisfied by accepting (12).

To generalize, a process of theoretical reasoning sets out from existing beliefs of yours and

(10)

concludes in a new belief. The contents of your beliefs are propositions, and the content of the reasoning is a sequence of propositions. I shall call the process of reasoning 'correct' if its content constitutes a valid inference. If reasoning is correct, the propositions that constitute its content stand in a particular relation to each other: the relation such that the conclusion is validly derivable from the premises. The relation of normative requirement that holds between the beliefs mirrors this relation of inference that holds between the belief's contents. If one proposition follows from others, then believing that proposition is normatively required by believing the others.

6. Third example: practical reasoning

What I have said about theoretical reasoning goes for practical reasoning too. However, since the nature of practical reasoning is contested, to explain this point I shall first have to outline the process of practical reasoning as I see it. I shall stick to instrumental reasoning only. My account is set out more fully in my 'Practical reasoning'.⁵

Here is an example of practical, instrumental reasoning:

	I am going to open the wine	(13a)
and	In order to open the wine, I must fetch the corkscrew,	(13b)
SO	I shall fetch the corkscrew.	(13c)

so I shall fetch the corkscrew.

I mean (13a) to express an intention of yours, rather than a belief. I mean (13b) to express a belief. I mean the conclusion (13c) also to express an intention.

You might actually go through this process of reasoning. Suppose you intend to open the wine, and then someone tells you the corkscrew is in the kitchen. This information imparts to you the belief that in order to open the wine, you must fetch the corkscrew. By reasoning, you form the intention of fetching the corkscrew.

Forming an intention this way is making a decision. Making a decision is as close to acting as reasoning can possibly get you. Reasoning could not actually get you to act, because acting requires more than reasoning ability. So this example of reasoning is as practical as reasoning can be.

Like all reasoning, this reasoning takes you from existing states of mind to a new one. Specifically, it takes you from an intention and a belief to a new intention. To describe the process in more detail, I shall assume your intentions and beliefs are propositional attitudes. That is to say, they are states of mind that have contents, and the contents are propositions. I shall assume your name is 'Pat', and I shall assume the proposition that Pat will open the wine is the same as the proposition that you, Pat, would express by saying 'I am going to open the wine'. So the content of your intention expressed in (13a) is the proposition that Pat will open the wine. Using the third person, and writing 'I' for 'you intend that', we can describe your reasoning process explicitly as follows:

I(Pat will open the wine)

B(In order for Pat to open the wine, Pat must fetch the corkscrew) (14b) and leads to I(Pat will fetch the corkscrew). (14c)

This describes your reasoning. It is not a derivation. If you intend to open the wine, and if you believe that in order to do so you must fetch the corkscrew, it does not follow that you intend to fetch the corkscrew. You might not have this intention if you are irrational, for instance.

On the other hand, (13) sets out the content of your reasoning. It has the form of a genuine derivation. Intuitively, it is correct reasoning; you are right to derive the intention of fetching the corkscrew from your existing intention and belief. Furthermore, it is indeed correct reasoning, as the following argument shows.

(14a)

Compar	re this process of theoretical reasoning:	
J	B(Pat will open the wine)	(15a)
and I	B(In order for Pat to open the wine, Pat must fetch the corkscrew)	(15b)
leads to 1	B(Pat will fetch the corkscrew).	(15c)
Again, this is a description of reasoning rather than a derivation. Its content is:		
l	Pat will open the wine	(16a)
and 1	In order for Pat to open the wine, Pat must fetch the corkscrew,	(16b)
so I	Pat will fetch the corkscrew.	(16c)
If you were running through this piece of reasoning, you would doubtless express it to		
yourself in	the first person:	

I shall open the wine

and In order for me to open the wine, I must fetch the corkscrew,

so I shall fetch the corkscrew.

(To make it clear that this is theoretical reasoning concluding in a belief, rather than practical reasoning concluding in an intention, imagine you are predicting your movements tomorrow, when you expect to be in a stupor.) This content constitutes a valid inference. The modality in (16b) is not needed for validity, but it does not invalidate the inference. If the premises are true, the conclusion is true too. For this reason, the theoretical reasoning described in (15) is correct reasoning. It is correct because its content constitutes a valid derivation.

The content of the practical reasoning (14) is the same syllogism (16) as the content of theoretical reasoning (15). The difference between the theoretical and the practical reasoning is not in the propositions that constitute their content, but in the attitude you take towards these propositions. In (15) your attitude is to take both premise as true. Because the conclusion is true if the premises are true, you cannot rationally take the premises as true without taking the conclusion as true. So your attitude towards the premises normatively requires you to take the conclusion as true. It requires you to believe it. In (14) your attitude towards the first premise is to set yourself to make it true. Towards the second premise, your attitude is to take it as true. Because the conclusion is true if the premises are true, you cannot rationally set yourself to make the first premise true, and take the second as true, without setting yourself to make the conclusion true. Your attitude towards the premises normatively requires you to set yourself to make the conclusion true. It requires you to intend it.⁶

Both (14) and (15) correctly track truth through the valid derivation (16). (15) tracks it in a truth-taking way; (14) in a truth-making way. Both therefore constitute correct reasoning. (15) is correct theoretical reasoning; (14) correct practical reasoning.

I shall use the term 'conclusion' sloppily for the mental state that results from a piece of reasoning, as well as for its content, and the term 'premise' for a mental state from which reasoning sets out, as well as for its content. So the premises of (14) are the intention of opening the wine and the belief that to open the wine you need to fetch the corkscrew. The conclusion is the intention of fetching the corkscrew.

The premises of practical reasoning normatively require the conclusion. For instance:

I(Pat will open the wine)

and B(In order for Pat to open the wine, Pat must fetch the corkscrew) requires I(Pat will fetch the corkscrew).

The relation between premises and conclusion is not the reasons relation. You might be tempted to think that, in some sense or other, you have a reason to intend to fetch the corkscrew, if you intend to open the wine and believe that to do so you must fetch the corkscrew. But to see this is wrong, we can once again apply the strictness test. If you intend

to open the wine, and believe that to do so you must fetch the corkscrew, you are definitely not entirely as you ought to be unless you intend to fetch the corkscrew. So the relation is strict, and therefore not the reasons relation.

Instead, it is the requirement relation. Consequently, no normative conclusion can be detached. Even if you intend to open the wine, and believe that to do so you must fetch the corkscrew, it does not follow that you ought to intend to fetch the corkscrew or that you have a reason to. Suppose, say, that you ought not to intend opening the wine in the first place, even though you do intend to open it. Then it may not be the case that you ought to fetch the corkscrew or have a reason to do so.

In general, intending an end normatively requires you to intend what you believe to be a necessary means. It does not give you a reason to intend what you believe to be a necessary means.

7. Reasons versus normative requirements

The examples show we must recognize normative relations that do not permit a normative conclusion to be detached in the way (2) and (4) do. This is an elementary and widely recognized point,⁷ but also one that is widely ignored. The relation of normative requirement is very often confused with the relation of being a reason for. For example, it is very commonly said that rationality consists in acting and believing for reasons. Indeed, most of the literature on rationality is about reasons: it asks what is a reason for what. But actually a large part of rationality consists in conforming to normative requirements, and is not concerned with reasons at all. For instance, one part of rationality is doing what you believe you ought to do, and this does not necessarily mean acting for reasons. Another part is reasoning correctly. Correct reasoning will lead you to have beliefs and intentions that you are normatively required to have by others of your beliefs and intentions. But it may not lead you to beliefs and intentions you have reason to have.

Why the confusion? I think one explanation is that the reasons relation and the requires relation are both, in a sense, weakenings of the oughts relation. The table in section 3 shows that. It is easy to confuse the two weakenings. For example, suppose you notice there must be a normative connection between believing something and believing one of its consequences. But suppose you also notice that believing something does not make it the case that you ought to believe its consequence; the oughts relation is too strong. You need something weaker, and the reasons relation may be the first weakening you think of. Surely, you say, your belief must give you *some* sort of a reason to believe its consequence. But once you recognize that the requires relation constitutes an alternative weakening, I hope you will see it is the appropriate one for this case.

Another source of confusion is an idiom of English. When a conditional proposition contains a modality, we tend to attach the modality to the consequent, even if that is logically not the correct place for it. We say, for instance, 'If it is raining, it must be thawing'. We do not mean, 'If it is raining, necessarily it is thawing', but, 'Necessarily, if it is raining, it is thawing'. Moreover, the antecedent may be implicit and not even stated: we notice the rain and say simply, 'It must be thawing'. Similarly, the proposition that believing p normatively requires you to believe q would be idiomatically expressed by: 'If you believe p, you should believe q'. Sometimes we might say simply, 'You should believe q', leaving the antecedent implicit — for instance, if your belief in p has already been established in our conversation. These expressions are good idiomatic English, but they misrepresent the logic of what is said.

Why does it matter? In the rest of this paper I hope to demonstrate the importance of the

distinction between reasons and normative requirements.

8. Conflicts

Conflicts between reasons are quite different from conflicts between normative requirements.

Take a conflict between reasons first. Suppose the true proposition p is a reason for you to q, and the true proposition r is a reason for you not to q. For example, that it is a sunny day is a reason for you to walk to the office; that you feet are sore is a reason for you not to walk but drive instead. These reasons need to be weighed against each other and any other relevant reasons you might have, in order to determine whether or not you ought to walk. Weighing is just what reasons are made for; this is what it means for them to be *pro tanto*. When reasons conflict, everything is in order. The conflict is settled by weighing.

But now suppose the true proposition p normatively requires you to q and the true proposition r normatively requires you not to q. Then something is wrong. This is because a normative requirement is strict. For example, suppose you believe that platypuses produce milk and all creatures that produce milk are mammals. These beliefs normatively require you to believe that platypuses are mammals. But suppose you also believe platypuses lay eggs and no mammals lay eggs. These beliefs normatively require you not to believe platypuses are mammals. Your original beliefs place you under conflicting requirements. This shows something is wrong. Indeed, your beliefs are inconsistent with each other.

For another example, suppose you intend to open the wine, and you believe that to do so you must fetch the corkscrew from the kitchen. This intention and belief require you to intend to fetch the corkscrew from the kitchen. But suppose you intend to keep a careful eye on what is going on in the dining room, and believe this cannot be done if you go into the kitchen. This intention and belief require you not to intend to fetch the corkscrew from the kitchen. Your existing intentions and beliefs place you under conflicting requirements. This shows something is wrong. Indeed, your intentions are inconsistent with each other.

When I say something is wrong, I mean you ought not to be in the state you are in. I can put it more formally. Suppose p normatively requires you to q, and r normatively requires you not to q:

	p requires q	(17)
and	<i>r</i> requires $\neg q$.	(18)
Then you	a ought to see to it that p and r are not both true:	

 $O(\neg (p \& r)).$

It must be a feature of the logic of normative requirement that (19) is derivable from (17) and (18). Indeed, given some axioms of deontic logic, (19) can be derived from $O(p \rightarrow q)$ and $O(r \rightarrow \neg q)$, which are respectively the logical factors of (17) and (18).

If you are under conflicting normative requirements, you are not as you ought to be; something is wrong with your condition. That is what (19) tells us. Normally, you ought to go back and sort things out. You should sort out your inconsistent beliefs or intentions, for example. This is quite different from the appropriate response to a conflict of reasons. Conflicting reasons require no sorting out, but simply weighing against each other.

What about conflicts between reasons and normative requirements? There is no contest. Reasons are concerned with what you ought to see to, and normative requirements are not. For example, suppose the balance of reasons is in favour of your seeing to it that q, but you believe you ought not to see to it that q. Then you ought to see to it that q, because the reasons together determine what you ought to see to. Your contrary belief normatively requires you not to see to it that q, but this does not count at all in determining what you ought to see to.

(19)

9. The practicality of practical reasoning

Now I come to the first of three examples of mistakes that have been made as a result of confusing normative requirements with reasons. It is a mistake of my own. I mention it only because it helps to illuminate the distinction between a reason and a normative requirement.

I used to be puzzled by a claim of G. E. Moore's.⁸ Moore thought that, when you have to choose between alternative acts available to you, you ought to choose the one that will have the best results. However, since you can never know for certain what the results of any act will be, you can never know for certain which of the acts available to you will have the best results. Consequently, Moore claimed that you can never know for certain what you ought to do.

I found that puzzling. Our rationality must be practical, so it must be able to engage with the predicament we find ourselves in in practice. One feature of our predicament is that we cannot know for certain what the results of our acts will be. Our rationality must be able to cope with this uncertainty. It must be able to determine an appropriate way of coping with it. So surely there is something you ought to do, *given* the uncertainty you are faced with, and surely you might know what it is.

In arguing against Moore, I imagined you trying to decide whether or not to go sailing. The benefits of sailing depend on the weather. You assign probabilities to the various possible states of the weather. I assumed these probabilities are such that the expected benefit of sailing is greater than the expected benefit of staying at home. Given that, I claimed you ought to go sailing. But Moore would have denied this is necessarily so. I said:

The conclusion of practical reasoning is a judgement of what ought to be done. And, also, it has to be a judgement one can act on. But the only judgement one can act on is relative to the probabilities available. Suppose, when wondering whether to go sailing, having consulted the sky and the weather forecast, you now consult Moore. You ask him what you should do. He replies that you cannot possibly know what you should do, but that probably you should go sailing. You, though, need to know what to do. Impatient with Moore's shilly-shallying, you ask him 'So what do you suggest I do, then?' Pressed like this, Moore will certainly tell you to go sailing. This is not simply an ungrounded whim on his part. He believes that practical reason, given the probabilities, requires you to go sailing; it would be irrational on your part not to. Another way of expressing this belief of Moore's is that you ought to go sailing. If it is irrational for you not to go sailing, then you ought to go sailing.⁹

This passage of mine is full of errors, whereas the attitudes I attributed to Moore are correct. Moore is right to believe that practical reasoning requires you to go sailing. (Strictly, it is your probability assignments and your beliefs about the benefits of sailing in various weathers that require you to go sailing. Practical reasoning is strictly only the instrument by which you discover this normative requirement, rather than the source of the requirement itself. But this is a minor slip.) Moore is also right to tell you to go sailing; this is the decision normatively required by your beliefs. But, contrary to what I said, it does not follow that you ought to go sailing. Contrary to what I said, the conclusion of practical reasoning is not a judgement of what ought to be done, but a decision to do something. My argument against Moore was mistaken throughout.

I now see Moore might be right when he says we can never know what we ought to do. I do not insist that he is right, and certainly not that he is right for the right reason, but I think he might be right. If he is, rationality will still be practical. Practical reasoning will still be possible, because the conclusion of practical reasoning is not a belief about what we ought to

do. We will still be able to reason properly in the face of uncertainty, and arrive by reasoning at intentions that are normatively required.

In responding to a view like Moore's, people sometimes call on the idea of a 'subjective ought'. About my example, they would say that, whatever you ought objectively to do — and you do not know — subjectively you ought to go sailing. I think this amounts to just another way of saying that your beliefs and probability assignments normatively require you to go sailing. I think 'subjective ought' is really just an alternative term for 'normative requirement'. If so, it is an unsatisfactory term for two reasons. First, it conceals the logical structure of the situation, because it does not make the 'ought' govern a conditional. Second, it implicitly makes the ought relative to the wrong thing. It makes it relative to the subject, whereas it should be relative to a fact: the fact that imposes the normative requirement. In this example, it should be relative to your state of belief.

This second inaccuracy will be particularly conspicuous if you have inconsistent beliefs or intentions. Then it may happen that some of your beliefs and intentions normatively require you to see to something, and others normatively require you not to see to it. This is a comprehensible feature of your inconsistent condition. But it is not comprehensible to say you subjectively ought to see to something and also you subjectively ought not to see to it; this looks like a contradiction. I think it is best to avoid the notion of subjective ought.

10. The tortoise's mistake

My next example of a mistake is made by the tortoise in Simon Blackburn's 'Practical tortoise rasing'.¹⁰ In a discussion with Achilles, this tortoise impugns the cogency of instrumental reasoning.¹¹

The discussion starts with Achilles's offering the tortoise this inference as an example of instrumental reasoning:

	You want the lettuce	(20a)
and	If you want the lettuce, you must cross the road,	(20b)
so	You must cross the road	(20c)
The tortoise objects on the grounds that (20b) is 'one of those off-colour conditionals where		
musts and oughts make the conclusion non-detachable', so that (20c) does not follow.		
His point is this (20h) superficially scenes to mean		

His point is this. (20b) superficially seems to mean:

If you want the lettuce, necessarily you cross the road. (21) (20c), which means 'Necessarily you cross the road', can be validly derived from (20a) and (21). But (21) is plainly false, and not what (20b) really means. It really means:

Necessarily, if you want the lettuce, you cross the road. (22) (20c) cannot be validly derived from (20a) and (22). So the tortoise is undoubtedly right to object to the syllogism (20). I can add the further objection that (22) is false. It is perfectly possible for the tortoise to want the lettuce and yet not cross the road.

Achilles spoiled his case by giving the tortoise a bad example of instrumental reasoning. We need to start again. As it happens, the tortoise himself supplies the materials for correct instrumental reasoning later in the conversation. He says 'If I am to get the lettuce, I must cross the road'. That is to say, a necessary means of getting the lettuce is to cross the road. So if the tortoise intends to get the lettuce, he can reason:

	I am going to get the lettuce	(23a)
and	In order to get the lettuce, I must cross the road,	(23b)
SO	I shall cross the road.	(23c)
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Provided the first premise and the conclusion express intentions, and the second premise a

belief, this is instrumental reasoning exactly on the model of (13). It is correct instrumental reasoning. If the tortoise intends to get the lettuce, he is normatively required to intend to cross the road.

Certainly, he cannot reach the detached conclusion that he ought to cross the road. Still less, that he must cross the road. But the tortoise needs neither of these conclusions, and neither would be true. He only needs 'I shall cross the road', expressing the intention of crossing the road. This intention may be correctly derived from the premises.

Instrumental reasoning does not lead to any detached normative conclusion for the tortoise, nor place him under any detached necessity. The tortoise seems to assume he is therefore not placed under any requirement of rationality. But he is: rationality requires him to intend whatever he believes to be a necessary means to an end he intends.

In speaking through the tortoise, Simon Blackburn's primary purpose is not to object to instrumental reasoning but to show that 'There is always something else, something that is not under the control of fact and reason, which has to be given as a brute extra, if deliberation is ever to end by determining the will.'¹² I have not disagreed with that. In my example (23) of instrumental reasoning, the tortoise's will is already determined to get the lettuce. Instrumental reasoning comes into play once the will is determined on a particular end. Its effect is to determine the will to take a means to the end it is already determined on. Since it comes into play only when the will is already determined, Blackburn has no real need to object to instrumental reasoning.

Blackburn's example (20) of putative instrumental reasoning suggests to me that he thinks instrumental reasoning should take you from wanting an end to intending (having your will determined on) a means. But this is to conflate two separate steps. There is first the step from wanting an end to intending the end, and second the step from intending the end to intending the means. The second step is negotiated by instrumental reasoning proper, and is entirely under the control of reason. I have nothing to say about the first step in this paper.

11. Korsgaard's mistake

Another example of a mistake comes from Christine Korsgaard's 'The normativity of instrumental reason'.¹³ Korsgaard is concerned with how instrumental reasoning gets its rational authority over our actions. How does the pursuit of an end require you to take a means to it? The conclusion she draws is that unless the end itself is invested with normative force, you cannot be normatively required to take the means. 'Unless there are normative principles directing us to the adoption of certain ends, there can be no requirement to take the means to our ends'.¹⁴ Instrumental reasoning could transmit normativity from the end to the means, but it cannot itself give the means normativity.

However, Korsgaard is also opposed to the realist view that some ends have normativity in the nature of things — that it is in the nature of these ends that they should be pursued. So she thinks the normativity must arise from a decision to pursue the end. She says:

For the instrumental principle ['that practical reason requires us to take the means to our ends'¹⁵] to provide you with a reason [to take the means to an end], you must think that the fact that you will an end *is a reason* for the end. It's not exactly that there has to be a *further* reason; it's just that you must take the act of your own will to be normative for you. . . . [This] means that your willing the end gives it a normative status for you, that your willing the end in a sense makes it good. The instrumental principle can only be normative if we take ourselves to be capable of giving laws to ourselves — or, in Kant's own phrase, if we take our own wills to be *legislative*.¹⁶

No doubt Korsgaard is right that you must take yourself to have a reason for your end *if* instrumental reasoning is to provide you with a reason to take a means. And if instrumental reasoning is to do this for you, I dare say her other conclusions would follow. But instrumental reasoning does not provide you with a reason to take a means. That is not how it works. Willing (or intending) an end normatively requires you to will whatever you believe is a necessary means to the end. I explained in section 6 how this normative requirement arises. Willing the end does not give you a reason to take the means, and it does not need to. So actually Korsgaard's conclusions do not follow. Willing an end need not give the end a normative status for you. Moreover, you can will an end without taking it as a law for yourself. You can simply decide to pursue it on one occasion.

Korsgaard's mistake illustrates an important feature of normative requirements. Reasoning is possible even in conditions that are unfavourable in a particular way. In your reasoning, you can take as premises beliefs and intentions you have no reason to have, and even beliefs and intentions you ought not to have. The nature of your reasoning is unaffected by whether or not you ought to have the beliefs and intentions it is premised on. Instrumental reasoning brings you to take appropriate means to your ends, and it is not paralysed if your ends happen to be ones you should not have. Similarly, your theoretical reasoning works well and in the same way, whether or not it is premised on beliefs you should not have.

How is this possible? It would not be possible if reasoning had to generate a reason for its conclusion. But in fact reasoning simply determines a normative requirement: that the premises require the conclusion. That is how reasoning is possible in unfavourable conditions.

12. Summary

Rationality does not consist entirely in acting for good reasons, as is commonly supposed. To a large extent it consists in following normative requirements. Consequently, rationality may bring you to do things you have no reason to do.

In particular, correct reasoning – both theoretical and practical – constitutes a major part of rationality, and correct reasoning is governed by normative requirements rather than by reasons. If it were otherwise, we could not reason in unfavourable conditions, on the basis of premises we have no reason to hold.

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Notes

1. This paper was written while I was a Visiting Fellow at the Swedish Collegium for Advanced Study in the Social Sciences. I thank the Collegium for its very generous hospitality. I have benefited greatly from discussions with Simon Blackburn, Jonathan Dancy, Sven Danielsson, Stephen Darwall, Susan Hurley, Donald Hubin, Karsten Klint Jensen, Jan Odelstad, Derek Parfit, Philip Percival, Christian Piller and John Skorupski on the subject of this paper.

2. In his 'Practical reasoning and the logic of requirement' (in *Practical Reason*, edited by S. Körner, Blackwell, 1974, pp. 2–13, reprinted in *Practical Reasoning*, edited by Joseph Raz, Oxford University Press, 1978, pp. 118–127), Roderick Chisholm provides a logic for a relation he calls 'requirement'. Chisholm's 'requirement' is *not* the same as my 'normative requirement', because it implies (2). See his D7, on p. 126 of the reprinted version. Chisholm's 'requirement' is my 'reasons' relation (1).

3. Deontic logic contains a notion of conditional obligation, written O(q | p), which could serve as a model for normative requirement. (See the survey in Lennart Åqvist's 'Deontic logic', in *Handbook of Philosophical Logic, Volume II*, edited by D. Gabbay and F. Guenthner, Reidel, 1984, pp. 605–714.) But deontic logic will not give us much help because the analysis of conditional obligation remains unsettled.

4. This example appears in Jonathan Dancy's 'The logical conscience', *Analysis*, 37 (1977), pp. 81–4.

5. Typescript.

6. I am oversimplifying when I identify intending with the attitude of being set to make true. Not all cases of being set to make true are cases of intending. So here I am skating over some complications. Details are in my 'Practical reasoning'.

7. Compare Robert Nozick, *The Normative Theory of Individual Choice* (Garland, 1990), pp. 94–8, which was written in 1963. The point receives a correct emphasis in Harry Gensler's *Formal Ethics* (Routledge, 1996), Chapter 3.

8. G. E. Moore, Principia Ethica, Cambridge University Press, 1903, p. 149.

9. John Broome, Weighing Goods, Blackwell, 1991, p. 128.

10. Mind, 104 (1995), pp. 695-711.

11. pp. 708–10.

12. p. 695.

13. In *Ethics and Practical Reason*, edited by Garrett Cullity and Berys Gaut (Oxford University Press, 1997), pp. 215–54.

14. p. 220.

15. This definition of the instrumental principle is implicit on p. 215.

16. pp. 245–6.