Rationality versus normativity

1. Introduction

Philosophers often fail to respect the distinction between rationality and normativity. Here is just one example from a turning point in the history of modern moral philosophy. In arguing that there are no external reasons, Bernard Williams says:

There are of course many things that a speaker may say to one who is not disposed to φ when the speaker thinks that he should be, as that he is inconsiderate, or cruel, or selfish, or imprudent...But one who makes a great deal out of putting the criticism in the form of an external reason statement seems concerned to say that what is particularly wrong with the agent is that he is *irrational*.¹

But a speaker who puts the criticism in the form of an external reason statement says that the agent has a reason to be disposed to φ . This is a normative statement. It does not impugn the agent's rationality at all.

The distinction between rationality and normativity has not been clearly drawn in philosophy. This paper starts to draw it. I first need to clarify the terms. The words 'rationality' and 'normativity', with their adjectives 'rational' and 'normative', are afflicted by a lot of ambiguity. In order to say exactly what this paper is about, I first need to specify what I mean by these words. Doing so occupies the next three sections of this paper.

Having specified my meanings, I shall go on to examine the substantive question of the relation between rationality and normativity. Since this paper is only a start, I shall concentrate only on the view that rationality consists in responding correctly to reasons. This is a reductive view, claiming to reduce rationality to normativity. It is part of the 'reasons-first'

¹ Williams, 'Internal and external reasons', p. 110. Original italics.

movement, which claims a foundational place for reasons in both normativity and rationality. It needs to be refuted.

2. The meaning of 'normative'

By 'normative' I mean: involving ought or reasons. I think this is the word's usual meaning in philosophy; it certainly is in moral philosophy. 'Normativity' in the title of this paper is in effect just standing in for 'ought' and 'reasons'. The subject of this paper is the relationship between rationality on the one hand and ought and reasons on the other.

Some philosophers give 'normative' the different meaning of involving correctness. Any rule and any intention sets up a standard of correctness. Complying with the rule or satisfying the intention is correct according to the rule or intention. So rules and intentions are normative in the sense of involving correctness. Furthermore, a person may be guided in her acts or thoughts by such a standard of correctness. This is what happens when you follow a rule or fulfil an intention. For example, a man may follow the rule of wearing a tie on weekdays. Each weekday morning, guided by the rule, he may carefully and deliberately tie his tie. But it need not be the case that he ought to do this, or has a reason to do it. Nor need he even believe he ought to or has a reason to. He may have been brought up to do it, and never have given any thought to the rule. This rule is normative in the sense of involving correctness, but it may not be normative in my sense.

As a useful piece of terminology, I shall say that a person is 'normatively compliant' if and only if she does what she ought to do, believes what she ought to believe, hopes for what she ought to hope for and so on. That is: if and only she Fs whenever she ought to F, where any verb phrase can be substituted for 'F'.

3. Meanings of 'reason'

Describing the meaning of 'rational' is a much longer task. Unlike 'normative', 'rational' is a term of common English. Philosophers are entitled to commandeer English words for technical purposes, just as the science of mechanics commandeered 'force'. However, doing so is risky because unwary readers may assume the word retains its common meaning. I shall use 'rational' with its common meaning. I think this is what philosophers of rationality generally intend; they generally aim to analyse rationality as we ordinarily understand it.

This section and the next are given over to clarifying the common meaning of 'rational'. The adjective 'rational' is cognate to the noun 'reason'; these words share the same Latin root 'ratio'. But this is not enough to tell us the meaning of 'rational', because 'reason' is itself a very ambiguous word. We need first to identify the sense of 'reason' that 'rational' is cognate to. I shall approach this task historically.

The word 'reason' entered English from French along with the Norman invasion of England in 1066. After that date, nothing was written in English for more than a century. The version of English that subsequently arose is known as 'Middle English'. One of the first books written in Middle English was the *Ancrene Riwle*, whose earliest manuscript dates from about 1225. It contains all the earliest occurrences of the word 'reason' (spelt 'reisun') in English.² Even at that date, 'reason' was ambiguous. It appears in the *Ancrene Riwle* with various different senses, all of which survive today.

Usually in that book, 'reason' means explanation. This is the meaning it has in the modern sentence 'The reason the climate is changing is humanity's burning of fossil fuel.' An example from the *Ancrene Riwle* is:

All strength comes from humility. And Solomon gives the reason why: where humility is, there is wisdom.³

Most often in the *Ancrene Riwle*, 'reason' refers to the special sort of explanation of a person's action that we nowadays call a 'motivating reason'. For example:

This, now, is the reason of the joining: why Isaiah joins hope and silence, and couples both together.⁴

Just once the *Ancrene Riwle* uses 'reason' to refer unequivocally to a normative reason, in this sentence:

² One exception is an occurrence of 'reason' in *The Martyrdom of Sancte Katerine* from about the same date. There it has a sense that is now obsolete.

³ I use Mabel Day's edition of the *Ancrene Riwle*. This passage is on p. 125, folio 75. My translations are based on http://www.bsswebsite.me.uk/History/AncreneRiwle/AncreneRiwle. html

⁴ p. 34, folio 19.

The third reason for fleeing the world is the gaining of heaven.⁵

A closer representation of the original grammar is:

The third reason of the world's flight is the gaining of heaven.

If the grammar is not enough to convince you that the author is referring to a normative reason as opposed to a motivating one, the context should be. The author has previously promised to enumerate reasons why one ought to flee the world:

Now hear reasons why one ought to flee the world: eight reasons at the least. $^{\rm 6}$

The gaining of heaven is the third reason in his list. A reason why one ought to F is a normative reason to F.

'Reason' in the *Ancrene Riwle* is a count noun. English also has a mass noun 'reason' with a normative meaning, but it did not appear till some centuries later. The *Oxford English Dictionary* lists no clear examples before this one from 1582:

Yet there is reason to think, that they knew what they did as well as he.⁷

Elsewhere in the *Ancrene Riwle*, 'reason' occurs once in the quite different sense that refers to a property of a person, specifically to the faculty of reason. Since this is a mental property, I call this the 'mental sense' of 'reason' to contrast it with the normative sense. The original text is:

Wummon is the reisun-thet is, wittes skile-hwen hit unstrengeth.8

The author has just recounted a parable from the Bible. He is saying that the woman in the parable represents the faculty of reason. Perhaps because the word 'reason' had only recently acquired the mental sense, he glosses it using an older English term for the faculty of reason, namely 'wittes skile', or 'wit's skill' in modern spelling.

⁵ p. 73, folio 43. My paper 'The first normative "reason"' explains how this normative meaning arose.

⁶ p. 72, folio 42. ⁷ Parsons, A Defence, p. 27. ⁸ p. 121, folio 73.

Since this earliest use of 'reason' in the mental sense is obscure, here is a clearer one from Shakespeare:

The will of man is by his reason sway'd.9

Here is David Hume using the word in the same sense, and contradicting Shakespeare:

Reason alone can never be a motive to any action of the will.¹⁰

Another example from Hume is:

'Tis not contrary to reason to prefer the destruction of the world to the scratching of my finger.¹¹

This last remark horrifies some philosophers. It is called 'silly' by Allen Wood¹² and 'grotesque' by Michael Smith.¹³ These authors understand Hume to mean (this is Wood's paraphrase):

I can have no reason not to prefer the destruction of the world to the scratching of my finger.

But Hume did not mean that. He was using 'reason' in the mental sense, whereas in Wood's paraphrase it has the normative sense.

4. The meaning of 'rational'

So, from the birth of Middle English, 'reason' has had at least three senses: the explanatory sense, which includes motivating reasons, the normative sense and the mental sense. The adjective 'rational' appeared two centuries later. It is first recorded by the *Oxford English Dictionary* in 1398. From its beginning it was cognate to 'reason' in the mental sense, and in that sense only. At first it meant 'having the faculty of reason'. It had this meaning and

¹³ Smith, 'Humean rationality', p. 76.

⁹ A Midsummer Night's Dream, act 2 scene 2.

¹⁰ Hume, *Treatise*, book 2, part 3, section 3.

¹¹ Hume, *Treatise*, book 2, part 3, section 3.

¹² Wood, 'Kant on practical reason', p. 65.

no other for about two hundred years. The *OED* shows that for all that time it was applied as a predicate only of people, creatures, souls, minds and so on—all things that could possess the faculty of reason.

The noun 'rationality' appeared in 1628 as the name of the property that is ascribed by means of the adjective 'rational'. Since this property is just reason in the mental sense, 'rationality' and 'reason' in this sense were originally synonymous.

However, the meanings of 'rational' and 'rationality' have subsequently broadened. 'Reason' in the mental sense refers only to a faculty. 'Rationality' today refers to the same faculty and also to the property of being in a particular state of mind-roughly, a coherent state of mind that could have arisen from the exercise of the faculty of reason. The term 'structural rationality' is sometimes used by philosophers today for the rationality of states. These days, we would not count a person as fully rational if she had the faculty of reason but not structural rationality. For instance, a person is not fully rational if she does not intend means to her ends, even if she has the ability to ensure that she does intend means to her ends. Ability-faculty-is not enough for rationality; we expect results. Moreover, a person's rationality might improve even without her exercising an ability. She might come to intend an act that she believes is a necessary means to an end she intends, not by doing anything at all, but as a result of subpersonal process within her. She is then more rational than she was before, even though she has not exercised her rational ability. Indeed, much of our rationality is achieved through subpersonal processes.

From 1598 onwards, the *OED* records 'rational' used as a predicate of things that do not have minds. These days we apply this predicate to acts, beliefs, city plans, and many other things without minds. These are derivative uses of 'rational'. They derive from the original, mental sense, which applies to people. The nature of the derivation varies with the object 'rational' is applied to, and it may be rather indefinite. For example, a person's act is rational if, were she to do it, she would be no less rational than if she were not to do it. A city plan is rational if it exhibits the sort of organization that is characteristic of a rational mind. And so on.

In this paper I stick to the primary use of 'rational', in which it denotes a property of a person. In this use it retains one central feature even in its broadened sense that includes structural rationality. As a property of a person, rationality is specifically a mental property. Moreover, it depends on the person's other mental properties. That is: Supervenience. Rationality supervenes on the mind.¹⁴

If a person would have the same mental properties apart from rationality in either of two possible situations, she would be equally rational in either.

For example, when a person intends to drink a glass of liquid, she is equally rational in the case when the liquid is petrol as she is in the case when it is gin, so long as the difference is not registered in any mental property of hers.¹⁵ For another example, if you fail to take a means to an end that you intend, this is not necessarily a failure of rationality if it is caused by some non-mental obstruction. It could be that, if you had had all the mental properties you do have, but the obstruction had not existed, you would have taken the means to your end. There would then have been no failure in your rationality, so Supervenience implies there is no failure in the actual case either.

What about mental externalism? I believe the Taj Mahal is built of marble. Suppose that, elsewhere in the universe, there is a Twin Earth that has all the same intrinsic physical properties as Earth. On Twin Earth lives a person called 'John Broome'. His intrinsic physical properties, including the intrinsic properties of his brain, are the same as mine. He has a belief that he would express with the words 'The Taj Mahal is built of marble.' His belief is about the Twin Taj Mahal, whereas mine is about the actual Taj Mahal. His belief is therefore not the same as mine; it has a different content and beliefs are individuated by their contents. At least, that is the implication of externalism about mental content. I take each of a person's beliefs to be a mental properties as mine has. If externalism is true, our mental properties do not supervene on our intrinsic physical properties, therefore.

That was an example of externalism about the content of mental states. Some philosophers also believe in externalism about the nature of mental states. Take two possible cases. In one, you know a car is approaching because you see a car approaching. In the other, all your intrinsic physical properties are the same, but you do not know a car is approaching. This is because, in that state, a perfect mock-up of a car is approaching. It seems to you that a car is approaching but you do know a car is approaching because none is. Timothy Williamson claims that knowledge is a mental state.¹⁶

¹⁴ I take this claim from Ralph Wedgwood in 'Internalism explained'.

¹⁵ This famous example comes from Bernard Williams's 'Internal and external reasons'.

¹⁶ Knowledge and Its Limits, chapter 1.

If that is so, you have a mental state in one case that you do not have in the other, even though all your intrinsic physical properties are the same.

If externalism about content is correct, the principle that rationality supervenes on the mind does not imply that Twin John and I are exactly as rational as each other, since our minds have different properties. If externalism about the nature of mental states is correct, the principle does not imply that you are equally rational in the two states I described in the previous paragraph. Nevertheless, it does seem plausible that twin John and I are exactly as rational as each other, and also that you are equally rational in the two states. So it seems plausible that there is some stronger principle that rationality supervenes on internal properties of the mind, defined in some way or other. But I do not know any such principle, and I do not assert that one exists.¹⁷

At any rate, externalism is no threat to the principle I do assert, that a person's rationality supervenes on her mental properties apart from rationality itself. It simply suggests there is also a stronger principle.

Substantive rationality

Some philosophers use 'rational' differently. They treat it as an adjective that is cognate to 'reason' in the normative rather than the mental sense. Niko Kolodny and John Brunero say:

'What would it be rational for an agent to do or intend?' could mean:

- 1. By doing or intending what would the agent make her responses (i.e., her attitudes and actions) cohere with one another?...
- 2. What does the agent have reason, or ought she, to do or intend?¹⁸

The definition implied in 1 is supposed to pick out structural rationality. As it happens, the mention of actions prevents it from doing so accurately, since a person's actions—apart from her mental actions—do not supervene on her mind. For example, suppose you intend to meet your obligations and believe

¹⁷ In 'Rationality and supervenience', Hille Paakkunainen takes me to assert that a person's rationality supervenes on her non-factive mental states. This is a misreading; Supervenience is not so strong.

¹⁸ 'Instrumental rationality'.

that in order to do so you must return the book you borrowed from your friend. You intend to return the book. You put it in the mail to her, but the mail fails, so you do not return the book. You do not do as you intend; your actions do not cohere with your intentions. However, suppose you never find out about the failure, so your mind has all the properties it would have had had you returned the book. Your mind may therefore be coherent. You may be structurally rational even though your action does not cohere with your intentions. So definition 1 is not accurate, but it is plainly meant as a definition of structural rationality.

The definition implied in 2 is also inaccurate. Suppose you have reason to intend something but stronger reason not to intend it. Kolodny and Brunero do not mean to suggest that it would be rational in any sense for you to intend it. I assume they meant to say 'decisive reason'.

Anyway, in 2 'reason' has its normative sense. The definition associates rationality with reason in this sense, so it gives 'rational' a normative meaning. This meaning could be justified as a construction. If you want an adjective cognate to 'reason' in the normative sense, 'rational' could serve. (An alternative is 'reasonable'.) However, so far as I can tell, 'rational' has never had this normative meaning in common English: it has always been cognate to 'reason' in the mental sense, and never in the normative sense.

It is not easy to be sure, since the extensions of the mental and normative senses coincide to a large degree. When an agent ought to do or intend something, it is usually rational in both senses for her to do or intend it. That is, she would usually be no less rational in both senses if she did or intended it than if she did not or did not intend it. This is because an agent normally has correct beliefs about what she ought to do or intend.

But we can separate the senses by taking a case where the agent ought to do or intend something, but believes she ought not to. Assume this belief coheres with the agent's other attitudes, so this is not like the case of Huck Finn as Nomy Arpaly describes him.¹⁹ Finn believes he ought not to protect Jim from the authorities, but this explicit belief of his does not cohere with his visceral recognition that Jim is a fellow human being and a friend. I assume, by contrast, that our agent's attitudes are coherent.

Presented with a case like this, would ordinary English speakers use 'rational' in Kolodny and Brunero's second, normative sense? In this sense, it would be rational for the agent to do or intend what she coherently

¹⁹ Arpaly, Unprincipled Virtue, pp. 75-8.

believes she ought not to do or intend. Would any ordinary English speaker say that? Since mistaken normative beliefs are rare outside philosophers' examples, I cannot provide empirical evidence. But I very much doubt it.

In a different place, Arpaly does offer some contrary empirical evidence.²⁰ An engineer she knew once told his girlfriend that they should do 'what's rational'. When the girlfriend asked him to define 'rational', he replied: 'what's better in the long run'. So he seems to have espoused a normative meaning. But Arpaly did not subject this engineer's definition to the falsebelief test I have just described. Suppose the engineer and his girlfriend did some act that they believed was better in the long run, and this belief cohered with their other attitudes. But suppose it later turned out that their act was actually not better in the long run. Would the engineer then have said that they did not act rationally? I very much doubt it.

These examples make it clear that Supervenience is a well-embedded conceptual feature of rationality, when it is a property of a person.

So far as I can tell, the normative sense of 'rational' is a recent invention of philosophers. I think it may be attributed to Max Weber, who gave it the name 'substantive rationality'.²¹ I mentioned in Section 3 the risks of commandeering a common English word as a technical term. We do not need this sense of 'rational' in philosophy; it simply leads to confusion. Most philosophers who write about rationality intend to write about it as it is commonly understood. That is my intention. Given all this, we should eschew the normative sense of 'rational', and I do.

I use 'rational' as cognate to 'reason' in the mental sense only, and I claim this is its correct usage in common English, when it is predicated of a person.

Reified rationality

We do need to recognize a further meaning of 'rationality' in which it is not the name of a property at all. We sometimes reify the property of rationality, treating it as a thing rather than a property. We do the same for morality. Morality is the property a person possesses when she is moral, but sometimes we treat it as something that stands outside a person and issues prescriptions to her. Similarly, we sometimes treat rationality as something that stands outside a person and issues prescriptions to her. The reified

²⁰ Arpaly, 'Four notes'. ²¹ See Kalberg, 'Max Weber's types of rationality'.

meaning of 'rationality' is well established in common English. It has its source in 'rationality's meaning as a property of a person, but it goes beyond that meaning.²²

In philosophy, reification is most apparent in the expression 'rationality requires'. The word 'requires' has more than one function. It may be used to specify a necessary condition for possessing a property. That is its function in 'Cleanliness requires soap': having soap is a necessary condition for being clean. But in 'The law requires you to vote' 'requires' specifies a prescription: the law prescribes that you vote. 'Rationality requires you to intend means to your end' might be interpreted in either of these ways. It might mean simply that intending means to your end is a necessary condition for your having the property of rationality. With this meaning, rationality is not reified. Or it might mean that rationality prescribes that you intend means to your end. With this interpretation, rationality is reified. It is treated as a thing like law.

I claim that the expression 'rationality requires' is most naturally understood in the reified sense.²³ I think we would not naturally say that rationality requires you to be alive. Being alive is a necessary condition for possessing the property of rationality, so unreified rationality does indeed require you to be alive. On the other hand, rationality does not prescribe that you are alive, so reified rationality does not require you to be alive. We naturally take 'rationality requires' this second way. What rationality requires in this more natural sense is a subset of the necessary conditions for being rational. I call this the set of 'requirements of rationality' or 'rational requirements'.

Nevertheless, satisfying the requirements of rationality is sufficient for possessing the property of rationality: if you satisfy all the requirements of rationality you are fully rational.

5. Reduction, entailment, and identity of requirements

I have described what I mean by the terms 'normativity' and 'rationality'. Now I come to the substantive question of the connection between normativity and rationality. The rest of this paper is devoted to examining the popular view about this connection that is expressed in the claim

²² Reification is fairly common. It deserves more study in philosophy than it has had, and more than I can give it. A very interesting approach to the metaphysics of reification appears in Paul Oppenheimer's 'Property identity and reification'.

²³ My evidence is contained in my *Rationality Through Reasoning*, pp. 119–26. Here I give just one example.

Reduction. Rationality consists in responding correctly to reasons.

I aim to show it is mistaken. Reduction implies

Identity. Rationality is responding correctly to reasons.

But Reduction goes further than that. It is a reductive claim: it claims that rationality can be reduced to responding correctly to reasons. It belongs to the reasons-first movement, which hopes to reduce rationality and all of normativity to reasons.

What is responding correctly to reasons? First, it is complying with reasons. By this I mean doing whatever your reasons require you to do, believing whatever your reasons require you to believe and so on—in short, Fing whenever your reasons require you to F. This is not the same as Fing whenever you have a reason to F. When you have a reason to F, you may have a stronger reason not to F, and in that case Fing is plainly not responding correctly to reasons. When your reasons require you to F, another way of putting it is that you ought to F. So complying with reasons is Fing whenever you ought to F. This is nothing other than normative compliance as I defined it in Section 2.

To respond correctly to reasons requires more than just normative compliance. It means Fing whenever you ought to F for the reasons that make it the case that you ought to F. All the same, responding correctly to reasons entails normative compliance. So Identity implies

Entailment. Necessarily, if you are rational you are normatively compliant.

I shall argue that Entailment is false. It will follow that Reduction is false. The basis of my argument will be:

The Quick Objection. Rationality supervenes on the mind and normative compliance does not supervene on the mind.

If your mental properties (apart from rationality) are the same in one possible state as they are in another, you are rational in one if and only if you are rational in the other, but you may be normatively compliant in one and not in the other. Rationality therefore cannot entail normative compliance.²⁴

²⁴ See my Rationality Through Reasoning, section 5.2.

The Quick Objection also constitutes an objection to this different claim:

Identity of Requirements. Rationality requires you to *F* if and only if you ought to *F*.

(When you ought to F we might say you are normatively required to F.) To check this consequence of the Quick Objection, compare two possible states in which your mind has all the same properties (apart from rationality). Suppose you are rational in one. Then, according to the Quick Objection, you are also rational in the other because rationality supervenes on the mind. In each state, therefore, you F whenever rationality requires you to F. So, according to Identity of Requirements, you F whenever you ought to F. This means you are normatively compliant in both states. But according to the Quick Objection, you may be normatively compliant in one and not the other, because normative compliance does not supervene on the mind. So if the Quick Objection is correct, Identity of Requirements is false.²⁵

There are only two ways to deny the Quick Objection. One is by asserting that normative compliance supervenes on the mind. The other is by denying that rationality supervenes on the mind. The next two sections argue that neither is successful.

As my sparring partners, I shall pick two leading recent defenders of Reduction: Benjamin Kiesewetter and Errol Lord. Both claim that rationality consists in responding correctly to reasons. When they express their respective views more fully, they say that rationality consists in responding correctly to 'available reasons' (Kiesewetter) or 'possessed reasons' (Lord). They allow for the existence of reasons that are not available or possessed. However, they take it that a person's unavailable or unpossessed reasons play no role in determining what she ought to do, ought to believe and so on.²⁶ Normatively they are loose cogs. This means they are not reasons at all, at least as I understand reasons.²⁷ Kiesewetter and Lord themselves often say simply that rationality consists in responding correctly to reasons.²⁸

²⁵ This argument is not the one I used in the original version of this paper, 'Rationality versus normativity'. Both Krister Bykvist in his 'Comments' and Paul Oppenheimer in his 'Property identity and reification' pointed out that the earlier version depended on a dubious assumption. The new argument is structured in a way recommended by Bykvist.

²⁶ Kiesewetter, The Normativity of Rationality, p. 163; Lord, The Importance of Being Rational, p. 222 ff.

²⁷ I define a reason in *Rationality Through Reasoning*, chapter 4.

²⁸ For example, Kiesewetter, *The Normativity of Rationality*, pp. 162–3; Lord, *The Importance of Being Rational*, p. 3.

6. Normative compliance does not supervene on the mind

Normative compliance is the property of *F*ing whenever you ought to *F*. It will supervene on your mind if two conditions are satisfied. The first is that what you ought supervenes on your mind. To be clear: by this I mean that, for any *F*, whether or not you ought to *F* supervenes on your mind. The second is that, whenever you ought to *F*, your *F*ing supervenes on your mind. To be clear, I mean: whenever you ought to *F*, whether or not you *F* supervenes on your mind. These are not strictly necessary conditions for normative compliance to supervene on your mind, but if they do not obtain, normative compliance could supervene on your mind only by good luck.

I shall examine each condition in turn.

Does whether or not you ought to *F* supervene on your mind?

The claim that what you ought supervenes on your mind is a sort of subjectivism about ought. It can be supported by any of several openly subjectivist theories. For example, one is the Bayesian theory that you ought to F if and only if *F*ing has the greatest expected value for you out of all the available alternatives, where expected values are given by your own credences and your own judgements of value.

Another theory starts from subjectivism about reasons. It claims that all your reasons are states of your mind. For example, reasons might be pairs, each consisting of a desire and a belief. Add to this the claim that your reasons determine what you ought by weighing against each other on the basis of your subjective judgements of weight. The result is a subjectivist theory of ought.

Many philosophers find subjectivism about reasons unattractive. It conflicts with common sense if nothing else. Common sense tells us that facts about the external world can be reasons. For example, the fact that heavy clouds are gathering is a reason to expect rain. Benjamin Kiesewetter agrees with common sense in this respect. He thinks that many reasons are facts about the external world. Here is one of his examples.²⁹ Suppose you are hunting a murderer, and you see someone disappear behind a tree. That

²⁹ *The Normativity of Rationality*, p. 167 ff.

someone disappeared behind the tree, which is a fact about the external world, may be a reason for you to believe that the murderer is hiding behind the tree.

Nevertheless, Kiesewetter argues that what you ought supervenes on your mind.³⁰ So he claims that this sort of subjectivism about ought is consistent with the view that reasons are often facts about the external world.

To support this claim, he says, first, that what you ought depends only on those of your reasons that are *available* to you. A reason is available to you only if it is part of your body of evidence. Only available reasons contribute to determining what you ought to do. Since I do not count unavailable reasons as genuine reasons,³¹ in discussing Kiesewetter I use 'reason' to refer to available reasons only, as Kiesewetter himself often does.

The fact that someone disappeared behind the tree is an available reason for you only if it impinges on your mind to the extent of being part of your evidence. This makes it possible for the existence of an available reason to supervene on your mind even though the reason is external.

But it only opens up a possibility; it does not ensure that the existence of an available reason supervenes on your mind. Change the example. Suppose now that you do not actually see someone disappearing behind a tree. It seems to you that you do, but this appearance is illusory. Actually, no one disappears behind the tree. Then you do not have the reason I described for believing the murderer is behind the tree. That reason was the fact that someone disappeared behind the tree, but in the new case there is no such fact. Yet your mind is in exactly the same state in the two versions of the example. So the existence of the reason does not supervene on your mind.

Kiesewetter offers two alternative responses to this problem. The first is a strong sort of externalism about the mind. In the original version of the example, the fact that someone disappeared behind the tree is part of your evidence; in the second version it is not. According to Timothy Williamson's externalist theory, your evidence is what you know, and your knowledge is a mental state of yours.³² So you are not in the same mental state in the two cases. Yet I assumed you are; that is how I demonstrated that the existence of your reason does not supervene on your mind. If Williamson is right, my demonstration fails.

³⁰ This argument appears in *The Normativity of Rationality*, chapter 7.

³¹ Rationality Through Reasoning, chapter 4.

³² Williamson, Knowledge and Its Limits, chapter 1.

So Kiesewetter's view that a reason must be part of your evidence, together with Williamson's externalism about the mind, may be enough to ensure that the existence of a reason supervenes on your mind. They are not yet enough to ensure that what you ought supervenes on your mind. What you ought depends also on what your reasons are reasons for, and how they combine together.

But we might extend Kiesewetter's theory to the extent of claiming that what you ought depends only on your total body of evidence, perhaps together with other features of your mind.³³ Your evidence will include external facts that constitute reasons. If we now add Williamson's externalism about the mind, so that your body of evidence is part of your mind, we shall get the conclusion that what you ought supervenes on your mind.

In this way, Kiesewetter combines a sort of subjectivism about ought with a sort of objectivism about reasons: reasons may be facts about the external world. He claims to have his cake and eat it. But his manoeuvre strikes me as a sleight of hand. The argument extends your mind to include the external facts that are reasons. The fact that someone disappeared behind the tree, when it is a fact, is counted as a feature of your mind. This extension of your mind is achieved through Williamson's externalism, which is unappealing. It implies that your knowledge that someone disappeared behind the tree is a mental state of yours, and whether or not you are in this mental state depends on the external question of whether or not someone disappeared behind the tree. Like subjectivism about reasons, this sort of externalism about the mind offends common sense.

Kiesewetter recognizes that many people do not accept it. So he offers an alternative argument. Go back to the example. In the first version you have a reason to believe the murderer is behind the tree, which is the fact that someone disappeared behind the tree. In the second version, you do not have that reason to believe the murderer is behind the tree, but Kiesewetter claims you do have a different reason to believe it, namely that it seems to you that someone disappeared behind the tree. Kiesewetter claims this second reason is just as strong as the first. He offers us this 'backup view':

If *A*'s total phenomenal state supports *p*, and *p* would—if true—be an available reason for (or against) believing *q*, then *A*'s appearances provide an equally strong available reason for (or against) believing q.³⁴

³³ Kiesewetter makes this extension in 'Rationality as reasons-responsiveness'.

³⁴ The Normativity of Rationality, p. 173.

If this is true, the reason you have in the second version of the example (the appearance) is just as strong a reason to believe the murderer is hiding behind the tree as the reason you have in the first version (the fact that someone disappeared behind the tree). Therefore, what your reasons require—what you ought—is the same in the two cases. So even if we drop externalism about the mind and accept that your mind is the same in the two cases, the example is consistent with the supervenience of what you ought on the mind.

The backup view faces at least two difficulties. One is that you have the appearance in the first version of the example as well as in the second. If it is a reason in the second version, it must be just as strong a reason in the first. But in the first version you have a further reason, which is the fact. If, as Kiesewetter supposes, your reasons in the second version are just as strong as in the first, this seems to imply that the fact has no weight as a reason. Only the appearance counts for anything, and the fact about the external world counts for nothing.

In response, Kiesewetter points out that, just because this reason makes no difference in this particular comparison, it does not follow that it counts for nothing at all. In this comparison it makes no difference because it is not independent of the other reason to believe q, which is provided by the appearance. It might count for something in a different comparison where it is independent, for example when it is weighed against other objective reasons.³⁵

However, my point is general. Subjectivism implies that what you ought depends only on your mental properties. If externalism is false, no external fact makes a difference to your mental properties, except indirectly by causally affecting some internal property. So if external facts are reasons, these reasons never directly make any difference to what you ought. They really do count for nothing. This makes Kiesewetter's recognition of external reasons seem like a sham. He cannot have his cake once he has eaten it.

Second, it is anyway clear that, if we assume as Kiesewetter does that the fact of p, when it is a fact, is a reason to believe q, the appearance of p is normally a weaker reason to believe q rather than an equally strong one. If the fact and the appearance are both reasons to believe q, that is because they are evidence of q, and the fact has to be stronger evidence. The appearance is

³⁵ Kiesewetter, 'Rationality as reasons-responsiveness'. In 'Rationality and supervenience', Hille Paakkunainen makes the same point in defending a similar claim of Errol Lord's in *The Importance of Being Rational*, chapter 7.

evidence of q only because it is evidence of p, which is evidence of q. So its evidential strength derives from the evidential strength of p, but is diluted. The fact of p normally adds more probability to q than the appearance of p does.

To illustrate this point, let us make an amendment to the example. Let us add two assumptions: first, you know that no one is nearby apart from you and perhaps the murderer; second, you have received a fairly reliable report that the murderer was recently seen in a distant city. In the first version of the example, it is a fact that someone disappeared behind the tree, and this fact is supposed to be a reason to believe the murderer is hiding behind the tree. If it is a reason, it can be nothing less than a decisive one. You know that someone disappeared behind the tree and the murderer is the only person it could be, so you definitely ought to believe the murderer is hiding behind the tree. But in the second version, it only appears to you that someone disappeared behind the tree. This appearance is supposed to be a reason to believe the murderer is hiding behind the tree, but you do not have a decisive reason to believe this. Given the report that the murderer is elsewhere, it is not the case that you ought to believe the murderer is hiding behind the tree. So if both the fact and the appearance can be reasons, the appearance is definitely not as strong a reason as the fact. The conclusion is that, in the first version of the example, you ought to believe the murderer is hiding behind the tree, whereas in the second version that is not so. Yet unless we accept externalism, your mind is the same in both cases. So once again, what you ought does not supervene on your mind.36

Kiesewetter claims that what you ought supervenes on your mind, even though some reasons are facts about the external world. His second argument from the backup view fails. I conclude that his defence of this claim has to depend on his first argument, which derives from an unappealing sort of externalism about the mind.

This is not an argument against subjectivism about ought. It is an argument against Kiesewetter's view that subjectivism about ought is consistent with objectivism about reasons. Since objectivism about reasons is attractive, this weakens the attraction of subjectivism, but there are many subjectivist theories that it does not touch. I do not deny subjectivism. I have even given some cautious, partial support to the Bayesian theory I mentioned at the beginning

³⁶ Kiesewetter responds to this argument in his 'Rationality as reasons-responsiveness', and I reply to his response in my 'Responses to commentaries'.

of this section.³⁷ So my argument that normative compliance does not supervene on the mind rests mainly on what is coming next.

Your Fing does not supervene on your mind whenever you ought to F

Acting on the world outside your mind does not supervene on your mind. For example, raising your arm does not supervene on your mind. You might fail to raise your arm even while your mind has exactly the properties it would have had if you had raised it. Your nerves might fail to activate your muscles and you might be looking the other way. So if you ever ought to act on the outside world, it will not be true that, whenever you ought to *F*, *F*ing supervenes on your mind.

But often you ought to act on the outside world. For example, sometimes you ought to insure your house against fire. Suppose you ought to do so and you believe you ought to do so. Suppose you set about insuring your house. You complete an application form and pay a premium to an insurance company in the usual way, without having studied all the fine print carefully. Now take two different cases. In the first, everything proceeds as expected, and your house is insured. In the second case the small print contains a clause that says your house is insured only if its roof is constructed of slate, tiles or metal. Actually, your house's roof is constructed of cedar shingles, so the house is not insured. Suppose this fact never comes to your attention because there is no fire. Then your mental properties are exactly the same in both cases. Yet in one case you insure your house as you ought and in the other you do not. You may be normatively compliant in one and not in the other. So your normative compliance does not supervene on your mind.

The only way to argue that, whenever you ought to *F*, your *F*ing supervenes on your mind is to deny that it is ever true that you ought to act on the external world. We would have to deny that you ought to insure your house, for instance. We might claim instead that you ought to have particular mental properties. We might claim, say, that you ought to intend to insure your house and then later come to believe that you have insured your house.³⁸

³⁷ In Rationality Through Reasoning, section 3.4.

³⁸ Kurt Sylvan has pointed out to me that this is precisely what H. A. Prichard claims in 'Duty and ignorance of fact'. Even with Jonathan Dancy's help I have not been able to extract a

But this is utterly implausible, for insurance and in general. It could easily be true that you ought actually to insure your house. Take a different example. The law requires you to pay your taxes. Generally, you ought to do as the law requires. This may be because the law is reason-giving in itself, or it could be your moral duty to obey the law, or it could be that it is prudent to obey the law because otherwise you risk punishment. In any case, for one reason or another, generally you ought to pay your taxes. This is to act in the outside world.

Or take an example from morality. On grounds of morality, you ought to be kind to vulnerable people, which is to act in the outside world. Or so it seems. But could the truth instead be that you ought to have certain mental properties? For instance, could it be that you ought to have a standing intention to be kind to vulnerable people? It could not, because this intention is not enough to ensure that you are kind. Even if you have the intention, you might fail to be kind, and then you would not fulfil your moral duty. Kindness requires a subtle sensitivity to people's needs and feelings, which demands quite a complex combination of mental properties. Merely intending to be kind might not bring you to develop this sensitivity even though you could; you might be too obtuse to realize you should. So to satisfy just this one requirement of morality you ought to have a complex combination of mental properties. What explanation can there be of why you ought to have just the combination that makes you kind, if it is not that you ought actually to be kind? I see no other possible explanation.

To summarize this section: the claim that normative compliance supervenes on the mind depends on two conditions. The first can be defended only on the basis of unappealing philosophical theories. The second is utterly implausible. So we may safely conclude that normative compliance does not supervene on the mind.

credible argument from Prichard's text. Nomy Arpaly in 'Four notes', Krister Bykvist in 'Comments', Benjamin Kiesewetter in 'Rationality as reasons-responsiveness' and Julia Markovits in 'Normativity from rationality' all make similar suggestions. Jesse Hambly has pointed out to me that in *What We Owe to Each Other*, p. 21, T. M. Scanlon says 'Judgement sensitive attitudes constitute the class of things for which reasons in the standard normative sense can sensibly be asked or offered.' This seems to deny that there can be reasons for acting in the external world. However, Scanlon immediately goes on to discuss reasons for action through the rest of the book. I think he means to say in the brief discussion on p. 21 that a reason for *Fing*, where *Fing* is an action, is *also* a reason for intending to *F*.

7. Rationality supervenes on the mind

The alternative way for a defender of Reduction to escape the Quick Objection is to deny Supervenience: the claim that rationality supervenes on the mind. Errol Lord does this, but his view has evolved and softened over time. My main argument for Supervenience is in Section 4. It is a conceptual truth, built into the meaning of 'rational'. Here I shall examine Lord's view because in the end it illustrates the strength of this conceptual constraint.

In his 2010 paper 'Having reasons and the factoring account',³⁹ Lord clearly denies Supervenience in presenting his example of Buddie. Buddie is at a party and orders a gin and tonic. He is given a glass and he intends to drink from it. Unbeknownst to him, the rule of the party is that those who order gin and tonic are served with petrol instead. This rule is printed on Buddie's invitation, which he has put on the bar in front of him. However, he has not read that part of the invitation. Lord says that Buddie is not rational in intending to drink from his glass. This is because he possesses a decisive reason not to intend to drink, which is the rule written on the invitation. He possesses this reason because he is in a position to know it. So Buddie ought not to intend to drink. Since Lord takes rationality to consist in responding correctly to possessed reasons, and Buddie intends to drink, Lord concludes he is not rational.

Compare Buddie's situation with a different one. It is just the same, except that the party has the different rule that those who order gin and tonic are served with gin and tonic. This is printed on Buddie's invitation, which is on the bar in front of him, but Buddie has not read that part. He intends to drink from his glass. Suppose that in both cases the glass is taken away before Buddie drinks from it, so the differing party rules never impinge on his mind in either situation.

Buddie's mind (apart from his rationality) has exactly the same properties in both cases. Yet in this second situation Buddie does not possess the reason not to intend to drink that he possesses in the first. So Lord would think him rational in intending to drink. He would take Buddie to be rational in one situation and not in the other, even though his mind is the same in both. Evidently, he thinks Buddie's rationality does not supervene on his mind.

³⁹ The example is on p. 292 of 'Having reasons and the factoring account'.

It is hard to believe this conclusion. In the situation where Buddie is supposedly irrational, where does he go wrong? It can only be in failing to read the part of the invitation that describes the rule. But he does that in the situation where he is supposedly rational too, so how can he be rational in one situation and not the other? Contrary to its original purpose, I think the Buddie example illustrates rather clearly that rationality does indeed supervene on the mind.

By the time of *The Importance of Being Rational*, Lord seems to agree. He has arrived at a different view about cases like this. He says that you are not in a position to know a fact unless that fact has affected your mind in some way.⁴⁰ The effect may be minimal. For instance, it may be the auditory experience of being told the fact, even if you do not register what you are told. But in the case of Buddie as I read it, the fact that the party rule is what it is does not have even a minimal effect. I assume that Buddie's only experience of the crucial sentence in the invitation is as a blur of text in the corner of his eye. It is the same experience in both cases. Given that, Lord would no longer consider Buddie irrational in one case and rational in the other.

The Importance of Being Rational also contains a gin-and-tonic example. It is this:

Happy Bernie. Bernie just got to a friend's birthday party after a gruelling day at the office. The birthday party is at a respectable bar. The bartender also makes excellent gin and tonics. Bernie quickly makes his way to the bar and orders a gin and tonic. He receives one, takes a sip, and is happy.

Deceived Bernie. Bernie just got to a friend's birthday party after a grueling day at the office. The birthday party is at a respectable bar. The bartender also makes excellent gin and tonics. Bernie quickly makes his way to the bar and orders a gin and tonic. However, unbeknownst to deceived Bernie, the bartender gives him a petrol and tonic instead of a gin and tonic. He takes a sip and is not happy.⁴¹

This example is useful in probing Lord's later view about Supervenience. If it is to be a test of Supervenience, the two Bernies must be 'mental duplicates', which is to say their minds must have all the same properties, up until the time they take a sip. For an externalist about knowledge, who thinks that knowledge is a mental state, they are not mental duplicates if Happy

⁴⁰ The Importance of Being Rational, p. 92.

⁴¹ The Importance of Being Rational, p. 188.

Bernie knows his glass contains gin and tonic, because Deceived Bernies does not know that. So to make room for externalists, let us assume Happy Bernie does not have this knowledge until he takes a sip. Then we can assume the Bernies are mental duplicates up until this time.

This example is consistent with the Buddie example, but it omits the specific explanation of Buddie's attitudes that is provided by the story of the invitations. Deceived Bernie plays the role of Buddie in his original situation; Happy Bernie the role of Buddie in the alternative situation. Lord says both Bernies are rational, which indicates that he has changed his mind since the 2010 paper. He is less willing to deny Supervenience.

Here is an outline of his thinking. Assume Happy Bernie is in a position to know that his glass contains gin and tonic. Then he possesses a reason to take a sip from his glass, which is the fact that it contains gin and tonic. Deceived Bernie does not possess that reason, because in his case there is no such fact. Nevertheless, he does possess a different reason to take a sip, which is the fact that it appears that his glass contains gin and tonic.

To generalize, take two mental duplicates, where one has a reason to F and the other does not. The happy one of the two possesses a reason to F, which is a fact p in the world, and she is in a position to know this fact. The deceived one does not possess this reason. However, her mind is the same as the happy person's, which implies that it appears to her that p. The fact that it appears to her that p is a reason to F, and she possesses this fact.

It is what Kiesewetter calls a backup reason. Lord's views are similar to Kiesewetter in several ways. He believes Reduction: he thinks rationality consists in responding correctly to reasons. He believes that reasons are objective facts in the world, rather than subjective states. And he adopts a backup theory in order to accommodate people who have false beliefs about objective facts.

However, Lord differs from Kiesewetter in one way. He takes more account of the fact that the happy person possesses the backup reason to F, just as the deceived person does. He recognizes that, since the happy person possesses a further reason to F, which is the fact that p, the happy person must possess stronger reasons to F than the deceived person possesses.

Lord assumes the balance of the reasons possessed by each of Happy Bernie and Deceived Bernie is in favour of taking a sip. But it now turns out that Happy Bernie possesses stronger reasons to take a sip than Deceived Bernie does. Since they both do take a sip, and since Lord thinks rationality is responding correctly to reasons, he concludes that Happy Bernie is more rational than Deceived Bernie.⁴² Since the two Bernies are mental duplicates, this implies that degrees of rationality do not supervene on the mind. Evidently, then, Lord still denies Supervenience to an extent.

Nevertheless, he does accept the supervenience of rational 'status' on the mind, as he puts it. He thinks that one of two mental duplicates is rational (though not necessarily to the same degree) if and only if the other is.⁴³ In the example, he believes both Bernies are rational in taking a sip.

Given that, I do not understand how their degree of rationality can be different. Since Lord thinks both are rational, and he thinks that rationality consists in responding correctly to reasons, he must think that the balance of reasons for both of them is in favour of sipping. Therefore, in the matter of sipping, he should think both are fully rational. Neither can be more than fully rational, so he should think them equally rational.

But that is not important. Lord makes a much more important mistake in taking it for granted that both Bernies are rational. Let us add detail to the example. Lord recognizes that the Bernies will possess reasons against taking a sip, so let us add a particular reason against doing so. Suppose that, while the drinks are being set up, each Bernie receives a phone call from a friend, requesting an urgent meeting to discuss a problem. This is a reason for each Bernie not to take a sip but instead leave to meet his friend. Assume it is a reason that is strong enough to outweigh Deceived Bernie's weaker reason to take a sip, but not strong enough to outweigh Happy Bernie's stronger reason. This must be possible since those reasons have different strengths. Given the contrary reason, Happy Bernie ought to take a sip and Deceived Bernie ought not to. This means that in taking a sip Happy Bernie responds correctly to his possessed reasons, but Deceived Bernie does not. Under the premise that rationality consists in responding correctly to possessed reasons, it is rational for one to sip but not the other.⁴⁴

Lord does not concur. He believes that Deceived Bernie ought to take a sip and is rational in doing so.⁴⁵ He offers an argument for this conclusion. The argument is, first, that whatever reasons Deceived Bernie has to believe his

⁴⁴ Javier González de Prado Salas makes the same point in 'Rationality, appearances and apparent facts'.

⁴⁵ In 'Rationality and suprvenience', Hille Paakkunainen reports Lord as taking the opposite view, but I think she misreads the text. Nevertheless, I have found her account of Lord's thinking very useful.

⁴² The Importance of Being Rational, p. 197.

⁴³ The Importance of Being Rational, pp. 189–92.

drink is gin and tonic are also reasons for him to take a sip. And, second, these reasons are sufficient. $^{\rm 46}$

The first step of this argument is based on the presumption that Deceived Bernie wants to drink a gin and tonic.⁴⁷ I shall not question it. In support of the second step, Lord provides a detailed argument to the conclusion that, if Happy Bernie has sufficient reasons to believe his drink is gin and tonic, then so does Deceived Bernie.⁴⁸ I shall not question this either. But it is clear that, whatever are Deceived Bernie's reasons for believing his drink is gin and tonic, even if they are sufficient reasons to determine that he ought to have this belief, and even if they are also reasons for him to take a sip, they are not sufficient reasons to determine that he ought to take a sip. To determine whether or not he ought to take a sip, his reasons for doing so must be weighed against his reasons for not doing so. These are not the same as his reasons for not believing that his drink is gin and tonic. So the balance of reasons for and against having the belief may differ from the balance of reasons for and against taking a sip. It can turn out that Deceived Bernie ought not to take a sip even if Happy Bernie-with his stronger reasons to take one-ought to do so.

So Lord is mistaken in claiming that, necessarily, both Happy Bernie and Deceived Bernie ought to take a sip. Given his view that rationality consists in responding correctly to reasons, he is mistaken in claiming that they are necessarily both rational in taking a sip. But the Bernies are mental duplicates. So Lord should have concluded that the status of rationality does not supervene on the mind. Once again, he should recognize that his theory implies that Supervenience is false.

Why does he not do so? It is plain that he feels the strong conceptual pull of Supervenience. He finds it intuitively compelling.⁴⁹ He gives over a chapter of *The Importance of Being Rational* to supporting Supervenience by explaining how it is consistent with his claim that reasons are objective facts.⁵⁰ He no longer accepts his earlier conclusion that, contrary to Supervenience, Buddie is irrational. True, Lord is still willing to give up Supervenience to the extent of denying supervenience of degree. But he will not give up supervenience of status.

⁴⁶ The Importance of Being Rational, pp. 191–2.

⁴⁷ This is made clearer in 'Having reasons and the factoring account', p. 288.

⁴⁸ The Importance of Being Rational, pp. 190–1.

⁴⁹ The Importance of Being Rational, p. 184.

⁵⁰ The Importance of Being Rational, chapter 7.

Yet if he had worked out the consequences of his theory properly, he would have had to. As I explained in Section 5, Reduction implies either than normative compliance supervenes on the mind or that rationality does not supervene on the mind. Kiesewetter and Lord both accept Reduction. But neither of them likes the idea that normative compliance supervenes on the mind. This is a sort of subjectivism about normativity, and they both think reasons are objective facts about the world. To try and maintain consistency in their view, both employ a backup theory of reasons. When a person falsely believe she has an objective reason, she has a backup reason instead, which consists of an appearance.

Kiesewetter ends up making objective reasons (apart from appearances) normatively impotent: they have no weight in determining what a person ought to do. In effect, he ends up with subjectivism—with normative compliance supervening on the mind. Lord avoids subjectivism by maintaining that objective reasons have weight. This means that normative compliance does not supervene on the mind. But then Reduction implies that rationality does not supervene on the mind either. Lord struggles to avoid this conclusion, but I have just explained that he does not succeed.

He is ultimately committed to denying Supervenience. But his struggle against recognizing this commitment shows how hard it is to deny. Supervenience is a conceptual truth.

8. Conclusion

I conclude that the Quick Objection is successful. Reduction and Identity of Requirements are both false. It is false that rationality consists in responding correctly to reasons, and it is false that what rationality requires of you is the same as what you ought.

Kiesewetter and Lord support Reduction. Others have made reductive claims about rationality that are similar but not the same. For example, Derek Parfit says that rationality consists in responding correctly, not just to reasons, but also to apparent reasons.⁵¹ Another difference is that Parfit does not interpret responding correctly to reasons as *F*ing whenever your reasons require you to *F*, but as *F*ing or trying to *F* whenever your reasons require you to *F*.⁵² Still, his view is an attempt to reduce the property of rationality to

reasons. I think this reductive enterprise is mistaken, but my argument in this paper is not a comprehensive answer to it. In this paper, I have argued only against Reduction. My argument has been only a quick objection.⁵³ It succeeds against Reduction, but other reductive claims call for less quick objections, which I have presented in my book *Rationality Through Reasoning*.⁵⁴

I recognize there are some tight connections between rationality and normativity. For one thing, rationality may be a source of normativity: if rationality requires you to F, that may be a reason for you to F. As I sometimes put it briefly: rationality may be normative.⁵⁵

Furthermore, rationality requires you to intend to F whenever you believe you ought to F. I call this requirement of rationality 'Enkrasia'.⁵⁶ It requires you to respond to your normative beliefs in a particular way. It differs from Reduction because it is only one of many requirements of rationality; another is the requirement to intend whatever you believe is a means implied by an end you intend, and there are many others. Still, it does constitute a tight connection between rationality and normativity.

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⁵³ Originally in my *Rationality Through Reasoning*, section 5.2. ⁵⁴ Chapters 5 and 6.

⁵⁵ I have investigated this question in *Rationality Through Reasoning*, chapter 11.

⁵⁶ See my Rationality Through Reasoning, section 9.5.