RATIONAL REQUIREMENTS AND REASONING

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This critical note concerns John Broome's book *Rationality through Reasoning* (2013). Broome claims that rationality amounts to satisfying rational requirements as opposed to responding correctly to reasons. My critique focuses on two issues. First, I try to show that Broome's account of rational requirements, in particular his answer to the so-called 'symmetry-problem', presupposes that responding correctly to reasons is part of rationality. Secondly, in discussing Broome's account of reasoning I criticize his claim that first-order reasoning involves no appeal to reasons and, hence, no normative thoughts on behalf of the reasoner.

Critical Note on *Rationality through Reasoning*, John Broome. Wiley-Blackwell, 2013.

1. INTRODUCTION

Starting with his ground-breaking article 'Normative requirements' (Broome 1999), John Broome has shaped the contemporary debate about rationality in a series of influential papers.¹ His main objective has been to develop and defend the thesis that rationality amounts to satisfying rational requirements and to reject the view that rationality consists in responding correctly to reasons. Broome applies his requirement-based

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¹ The most important are Broome (2002, 2004, 2007, 2008, 2009).

account of rationality to theoretical and practical rationality: Rational requirements, so his thesis goes, regulate the relations among our mental attitudes, beliefs as well as intentions.

The most important requirements for ordering our beliefs are *Belief Consistency* (the requirement not to believe that p if you believe that notp) and *Belief Closure* (the requirement to believe that q if you believe that p and that if p then q). The crucial requirements for practical reasoning are *Intention Coherence* (the requirement not to intend to X if you intend not to X), and *Instrumental Reasoning* (the requirement to intend to M if you intend E and believe that your realizing E requires that you M). There is another requirement of rationality Broome considers to be particularly important, namely *Enkrasia* which says: Rationality requires of you that, if you believe you ought to F, you intend to F.² *Enkrasia* provides, according to Broome, a link between theoretical and practical rationality.

As these examples show, requirements do have a distinctive logical structure: they have the form of a conditional. Rational requirements, as Broome famously used to put it, contain a *wide-scope ought*; reason-based requirements, however, contain a *narrow-scope ought*. A wide-scope rational requirement tells you to bring your attitudes in order, for example, by avoiding inconsistency, by reaching means-end coherence, or by bringing your intentions in line with your beliefs. Explicating rationality via wide-scope rational requirements ties rationality to a reasoning process, whereas the responding-correctly-to-reasons approach, as I read Broome's criticism, neglects that important aspect.

In his new book *Rationality through Reasoning* Broome aims to show in detail how rationality works through reasoning. The book offers much more than a concise presentation of his main arguments over the years. Broome has pushed his analysis of rationality much further, and in several parts of the book he presents revised versions of his earlier positions.

The main focus of the book is on answering what Broome calls the motivation question, namely: how can we explain that our beliefs about what we ought to do often cause a corresponding intention? Broome raises this question in Chapter 1 and provides his answer, which rests on a defence of the encratic principle, in the final chapter of the book. The

² The full formulation of Enkrasia is: Rationality requires of N that, if

- (1) *N* believes at *t* that she herself ought that *p*, and if
- (2) *N* believes at *t* that, if she herself were then to intend that *p*, because of that, *p* would be so, and if
- (3) *N* believes at *t* that, if she herself were not then to intend that *p*, because of that, *p* would not be so, then
- (4) *N* intends at *t* that *p* (Broome 2013: 170).

intermediate chapters develop the tools he needs for his answer to the motivation question. In addition, the book also discusses and analyses several issues relevant to our understanding of rationality in an admirably thorough way.

To give a quick overview: Chapters 2 and 3 focus on the concept of 'ought'. Broome argues that there is a central notion of 'ought' which is captured by Enkrasia. Chapter 4 offers an analysis of reasons, introducing a distinction between pro toto and pro tanto reasons. Pro toto reasons offer explanations for why an agent ought to X whereas pro tanto reasons offer weighing explanations. In Chapters 5 and 6 Broome summarizes his arguments against the view that rationality consists in responding correctly to reasons, and he explains why he does not think that responding correctly to reason-beliefs (= a person's beliefs about the reasons there are) offers a better solution. In Chapters 7-10 he discusses the nature of requirements, especially the meaning of conditional requirements and synchronic as well as diachronic requirements of rationality. Chapter 11 focuses on the question whether rationality is normative. Broome is sceptical: He thinks rationality is normative in its own right, but concedes that he has no decisive argument to show why this is so. In Chapters 12–16 Broome discusses in more detail the reasoning process implied by rational requirements. Chapters 12 and 13 discuss the distinction between higher-order reasoning and first-order reasoning. Broome claims that reasoning that satisfies rational requirements is first-order reasoning. In Chapters 14 and 15 Broome depicts practical reasoning and its relation to theoretical reasoning. He is careful to emphasize the independence of practical reasoning from theoretical reasoning and thus revises his earlier approach, which tied practical reasoning too closely to a logical-theoretical form of reasoning. In the final Chapter 16 Broome elucidates the structure of enkratic reasoning, showing how it meets the principle of Enkrasia.

In the following discussion I will focus on two issues. First, does Broome offer new and convincing arguments for his claim that rationality is a matter of fulfilling rational requirements and not a matter of responding correctly to reasons? Second, is Broome's depiction of the reasoning process and his account of first-order reasoning appropriate? More specifically, is his claim that first-order reasoning involves no appeal to reasons and thus no normative thinking tenable?

With regard to the first question, I will argue that Broome's claim that rationality can be explained merely as satisfying rational requirements is implausible. As to the second question, I will criticize Broome's claim that we do not need 'to impute a normative thought to the reasoner' (Broome 2012: sec. 4).³ Such a thesis not only amounts to an inaccurate picture of

³ This essay is the basis for Broome (2013: sec 13.5).

theoretical and practical reasoning, it is especially problematic when it comes to enkratic reasoning.

2. RATIONALITY AND RESPONDING CORRECTLY TO REASONS

Broome expresses the hope to 'have done enough to scotch this view' that rationality consists in responding correctly to reasons (Broome 2013: 107). His main strategy for undermining the responding-correctly-to-reasons account of rationality is to raise objections against the following condition:

Equivalence: Necessarily, you are rational if and only if you respond correctly to reasons (Broome 2013: 72).

Crucial for his objection is the way Broome spells out Equivalence, namely into

Equivalence analysed: Necessarily, you are rational if and only if, whenever your reasons require you to *F*, you *F* and an appropriate explanatory or counterfactual connection holds between your reasons and your *F*-ing (Broome 2013: 74).

This implies the

Core Condition: Necessarily, if you are rational, you *F* whenever your reasons require you to *F* (Broome 2013: 74).⁴

Broome raises 'a quick objection' to Equivalence which runs as follows: It might be that your reasons require you to *F*, yet you do not believe your reasons require you to *F*. So you do not *F*, but, Broome assumes, you may still be rational. Therefore the Core Condition is false. Given the entailment relation between the Core Condition and Equivalence, Equivalence is also false (Broome 2013: 74f.). The bulk of Chapter 5 defends the 'quick objection' through a careful refutation of possible objections. I skip the details here.⁵ The upshot is that Broome rejects *Equivalence* as wrong and also the converse propositions contained by it, namely *Entailment* (Necessarily, if you are rational you respond correctly to reasons) and *Sufficiency of reasons* (Necessarily, if you respond correctly to reasons you are rational).

Broome's claim that rationality is exclusively a matter of fulfilling rational requirements seems implausible. There is a fairly easy way to see this. Recall that Broome defines rational requirements in terms of a

⁴ The intermediate step is *Entailment analysed*: Necessarily, if you are rational then, whenever your reasons require you to *F*, you *F* and an appropriate explanatory or counterfactual connection holds between your reasons and your *F*-ing (Broome 2013: 74).

⁵ A detailed discussion of Broome's intriguing arguments would be the topic of a separate paper.

wide-scope conditional. Take the Instrumental Requirement, formulated by Broome as:

- IR 1: Rationality requires (if you intend *E* and believe that *M* is a necessary means to *E* and that your *M*-ing is necessary to realize *E*, then form the intention to M).⁶
- IR 1 is logically equivalent to:
- IR 2: Rationality requires (you do not intend *E* or you do not believe that M is a necessary means to *E* or you form the intention to M).⁷

This shows that the Instrumental Requirement can be fulfilled in several ways: by forming the intention to *M*, by giving up the intention to *E*, or by giving up the belief that *M*-ing is a necessary means to *E*. The wide-scope account of rational requirement does not reach further than revealing the formal structure of the requirement and how to satisfy it.

Surely, however, our expectations concerning rationality go beyond elucidating the formal features of rational requirements. Rationality should not leave us in limbo about how to satisfy a rational requirement and our choice between the various options should not be arbitrary. In so far as we are rational agents, we need to make a justified choice between the alternative ways of satisfying the requirement. Since rational requirements as such do not tell us how to accomplish that, a further standard of rationality is obviously needed. In choosing between alternative ways of meeting a rational requirement in a rationally justified way, we need to consider carefully what reasons we have for taking the one or the other option, which entails a weighing of reasons. Thus, as some philosophers claim, rationality is also a matter of responding correctly to reasons.

The problem for Broome's position arises because the wide-scope formulation entails the symmetry of the alternative ways of meeting the instrumental requirement. But the situation in which the requirement applies is, as some philosophers have objected, one where an agent

- 6 See e.g. Broome (2004: 29). Broome's most recent formulation of the instrumental requirement is: Rationality requires of N that if
 - 1) *N* intends at *t* that *e*, and if
 - 2) *N* believes at *t* that, if *m* were not so, because of that *e* would not be so, and if
 - 3) *N* believes at *t* that, if she herself were not then to intend *m*, because of that *m* would not be so, then
 - 4) *N* intends at *t* that *m* (Broome 2013: 159).
- ⁷ The intermediate step is: Rationality requires [not (intending to *E* and believing that your *M*-ing is a necessary means to *E*) or form the intention to *M*)].

intends end E.⁸ Thus, claiming that the instrumental requirement can equally be fulfilled by giving up end E, or by taking the means M, or by giving up the belief that M-ing is a necessary means to E misrepresents the agent's deliberative context. In a situation in which you intend end E, it would be rational to intend M if you believe M is a means implied by E; but it would be irrational not to believe M is a means implied by E because you do not intend M.

The symmetry problem also affects the principle of Enkrasia:

Enkrasia 1: Rationality requires of you (if you believe you ought to *F*, then you intend to *F*)

which is by contraposition logically equivalent to:

Enkrasia 2: Rationality requires of you (if you do not intend to *F*, you do not believe you ought to *F*).

Broome is aware that Enkrasia seems 'symmetrical between believing you ought to F and not intending to F' (Broome 2013: 139). However, the relation between your believing you ought to F and your not intending to F should be asymmetrical since '[i]t would be rational for you to intend to F because you believe you ought to F, but irrational for you not to believe you ought to F because you do not intend to F' (Broome 2013: 139). He tries to solve the symmetry problem – not surprisingly – by appealing to further requirements of rationality.

Broome comes up with two suggestions. First, he mentions the possibility that further requirements might apply which account for the asymmetry in Enkrasia. For example, you might be subject to a *Modus Ponens Requirement* of the form: Rationality requires of *N* that, if *N* believes at *t* that *p*, and *N* believes at *t* that if *p* then *q*, and if *N* cares at *t* whether *q*, then *N* believes at *t* that *q* (Broome 2013: 157). If you have, Broome argues, 'grounding beliefs' which entail by modus ponens that you ought to *F*, and you care about whether you ought to *F*, then you are according to the *Modus Ponens Requirement* not rational if you do not believe you ought to *F*. Together with the requirement (you are not rational if you believe you ought to *F* and do not intend to *F*) it follows that, 'given your grounding beliefs, you can be rational only if you believe you ought to *F* and you intend to *F*' (Broome 2013: 140). The grounding belief, he argues, blocks the symmetry.

But second, and more importantly, Broome claims that there are 'basing prohibitions of rationality' which forbid basing some particular attitude – or lack of an attitude – on another particular attitude. He thus tries to fix the symmetry problem by introducing the following

⁸ This objection was first raised by Schroeder (2004); for a rejection of the symmetry objection see Way (2010). For a solution of the symmetry problem through introducing the notion of 'rational commitment' see Shpall (2013).

requirement: Rationality requires of you that you do not (not believe you ought to *F* on the basis of your not intending to *F*) (Broome 2013: 141).⁹

Neither suggestion is, I think, convincing. In the case of Broome's first proposal, the decisive factor in discarding the symmetry is the grounding belief which entails that you ought to F. A belief, however, can only be a grounding one if there are strong reasons (in Broome's terminology a pro toto reason) for the belief. The statement that 'given your grounding beliefs, you can be rational only if you believe you ought to F and you intend to F' merely is another way of saying that your belief that you ought to F is supported so strongly by reasons (evidence) so that you are not rational if you do not believe that you ought to F - which, by Enkrasia entails that you intend to F.

A similar problem affects Broome's second suggestion, namely ruling out the symmetry by introducing a basing prohibition. The plausibility of the basing prohibition clearly rests on the fact that your not intending to F cannot be a reason for your not believing that you ought to F. The presence or absence of your intention to F is not a reason for or against that you believe you ought to F.

Broome might reject this objection by claiming that he relies on an inferential interpretation of basing. He distinguishes between two types of basing, namely basing that relies on evidence ('evidential basing') and basing that relies on inferences ('inferential basing') (Broome 2013: 188f.). For a large part, our beliefs are based on evidence. But often, and this holds according to Broome especially with respect to issues of rationality, beliefs are not directly based on evidence, but – via inference – on other beliefs. Broome's example: your belief that you are pregnant can be based inferentially on your beliefs that (1) the test paper is orange and (2) if the test paper is orange then you are pregnant (Broome 2013: 188). It seems to me, however, that the rationality or irrationality of your believing that you are pregnant cannot be assessed without taking into account whether the beliefs functioning as premises in your inference are based on evidence or not – in other words, whether there are reasons for holding them.

Accounting for the asymmetry by appealing to reasons allows for a straightforward answer to the symmetry problem. With respect to the Instrumental Requirement this means: If you have strong reasons to intend end E, then it is not rational to give up the intention to E simply because you do not intend to M. For example, if you intend to lose weight because the doctor ordered you to do so (otherwise you risk suffering a heart attack), then it is irrational of you to give up this end because you do not intend to give up your excessive chocolate eating (which is the means implied by E). Thus, the way the IR requirement is satisfied is not symmetrical between giving up the end and not intending the means.

⁹ In his formulation of the requirement Broome omits the parentheses.

In the case of Enkrasia, the asymmetry plays out as follows. If you have strong reasons for believing you ought to F, so that, for example, your belief that you ought to F rests on an all things considered judgement, then there is support for your intending to F. Conversely, your not intending to F cannot be a reason (= a basis) for your not believing you ought to F. Thus the problem that the requirement of Enkrasia can be met by satisfying the consequent (you do not believe you ought to F) on the basis of the antecedent (you do not intend to F) does not arise.

I do not want to claim that rationality is exclusively a matter of responding correctly to reasons and that rational requirements play no role. My point is rather that a proper account of rationality should also take into account that rationality requires reflecting on the reasons we have for holding or not holding beliefs and for forming or not forming particular intentions.¹⁰

Sometimes one gets the impression that Broome seems to identify the responding-correctly-to-reasons approach with a sort of immediate isolated response to particular facts or beliefs about facts without any mental process relating the various responses and bringing them into order.¹¹ Nothing, however, excludes the connection between reasons and a reasoning process.¹² Taking reasons into account inevitably involves one in reflection, deliberation and reasoning.

3. REASONING

The second issue I want to discuss is Broome's account of reasoning. Rationality consists, he argues, not merely in meeting rational requirements, but in meeting them in a special way, namely through our own reasoning processes.

According to Broome, reasoning is a conscious activity taking you from premise-attitudes (belief, intention) to a conclusion-attitude (either a belief or an intention) (Broome 2013: 221). A causal process is involved:

¹⁰ Broome concedes that responding correctly to reasons cannot be ruled out completely; rationality at least 'entails responding correctly to your reason-beliefs' (Broome 2013: 90). This concession is a consequence of his acceptance of Enkrasia. Broome grants that Enkrasia can be reformulated as 'Rationality requires of you that, if you believe your reasons require you to *F*, you intend to *F*' (Broome 2013: 90). He also accepts the Enkratic Condition: Necessarily, if you are rational, you intend to *F* whenever you believe your reasons require you to *F* (Broome 2013: 89).

¹¹ Korsgaard, for example, who reads the responding-correctly-to-reasons account in this way therefore associates it with interpreting reason as a merely 'receptive' faculty (Korsgaard 2009: 24).

¹² Defenders of a responding-correctly-to-reasons account of rationality do not ignore that rationality is tied to reasoning. Joseph Raz, for example, states that 'a minimal reasoning ability' by which he means the ability to grasp inferential relations 'is among the constituents of capacity-rationality' (Raz 1999: 69).

your premise-attitudes cause you to have a conclusion-attitude, but the causing relation is merely necessary, not sufficient. This is so since a belief in a premise might cause you to have a belief-conclusion though this might not be reasoning. Broome's example: You might be in a strange mental condition so that believing that it rains brings you to hearing trumpets (Broome 2013: 226). The example also shows that reliability is neither a necessary nor sufficient condition for reasoning. The process bringing you to hear trumpets when you believe that it is raining might be reliable given your weird mental condition; nevertheless the process is not an instance of reasoning.

Important for reasoning is also your having a belief that links the premises to the conclusion (linking belief). The linking belief in theoretical reasoning (reasoning with beliefs) is that the conclusion is implied by the premises; the rule might be, for example, modus ponens or modus tollens (Broome 2013: 229). Crucial for reasoning is your operating on the contents of your premise-attitudes in a rule-governed way to construct the content of your conclusion-attitude (operating condition) (Broome 2013: 229–232). Reasoning is correct if it follows a correct rule.¹³ Broome defends a first-order account of reasoning which means that you reason with your attitudes and also about their contents, but you do not reason about your attitudes (Broome 2013: 242).

Broome illustrates this with the standard cases of theoretical and practical reasoning, belief reasoning and intention reasoning. The relevant reasoning schemas are (Broome 2013: 252):

Theoretical reasoning	Practical reasoning
From $< p$; belief $>$ and	From $< p$; intention $>$ and
$\langle \text{if } p \text{ then } q \rangle$; belief \rangle to derive	<if <i="">p then <i>q</i>; belief> to derive</if>
< <i>q</i> ; belief>.	< <i>q</i> ; intention>.

As mentioned, Broome's claim that first-order reasoning involves no normative thoughts on the side of the reasoner is, in my view, mistaken. By 'normative thoughts' he means 'appealing to reasons'. His worry is that taking reasons into account amounts to a higher-order account of reasoning that is prone to a vicious regress. This seems wrong to me and here is why.

Broome defines a higher-order account of reasoning as one in which a higher-order belief may be part of the premises. Broome mentions two

¹³ However, following an incorrect rule might still count as reasoning. Two kinds of mistake are possible: you can reason according to an incorrect rule or you can make a mistake in following a rule which might be correct or incorrect. Broome evades the problem of how to determine whether you follow a correct or an incorrect rule by simply claiming that 'reasoning is correct if and only if it correctly follows a correct rule' (Broome 2013: 242).

ways in which this might happen: either a premise-belief is already a higher-order belief (a second-order belief) or a higher-order linking belief, a belief in the principle or rule of your reasoning, is part of the premises. Broome sometimes gives the impression that both ways lead to a regress. However, a closer look shows that only the second gives rise to an infinite regress and thus renders a satisfactory account of reasoning impossible.

A regress in the first case would only come about if you were to justify your second-order belief by a third-order belief, the third-order belief by a fourth-order belief, and so on. However, Broome himself claims that such a regress can be stopped already at the level of a second-order belief. His example is enkratic reasoning. Broome concedes that enkratic reasoning starts with a second-order normative belief, namely believing that one ought to *F*. However, no regress is initiated. He writes:

Enkratic reasoning $[\ldots]$ inevitably involves a second-order normative belief $[\ldots]$. But on my account it involves no belief that has an order higher than that one. It is not a higher-order account in that sense. It has the character of first-order reasoning \ldots (Broome 2013: 211)

In the second case, however, when the linking belief is included in the premises, the infinite regress is inevitable. The linking belief, as Broome rightly emphasizes, cannot be part of the premise-beliefs. If it were, the only justification of the linking belief that you can give is by appealing to a more complex formulation of the linking belief which contains the initial linking belief. If the linking belief is part of the premises you would, for example, have the following inference pattern:

- (1) It is raining.
- (2) If it is raining, the snow will melt.
- (3) If (it is raining and if it is raining the snow will melt) then the snow will melt.

Therefore the snow will melt.

The linking belief here is 'if (it is raining and, if it is raining the snow will then melt, and if (it is raining and if it is raining the snow will melt) the snow will melt) then the snow will melt'. If that linking belief would also be part of the premises, you need a more complex linking belief to explain the connection between premises and conclusion. This way you end up in an infinite regress forcing you to provide more and more complex formulations of the linking belief (Broome 2013: 230).¹⁴

In order to rule out that the linking belief is part of the premises, Broome draws a clear line between a premise-belief and a linking belief

¹⁴ The classical case for this problem is Lewis Carroll's discussion of the argument between the tortoise and Achilles.

with the help of the operating condition: Reasoning is an operation on the contents of your premise-beliefs, but you do not operate on the content of the linking belief (Broome 2013: 234).

Broome's thesis that first-order reasoning does not include normative elements rests on the claim that invoking reasons and oughts would amount to a higher-order account of reasoning, giving rise to an infinite regress. Broome's argument can be found in his critique of Paul Boghossian's account of inference. According to Boghossian, inferring q from p includes taking a specific attitude to q, namely to judge that q because you take 'the (presumed) truth of p to provide support for q' (Boghossian 2012: sec. 3). For example, my inferring (3) 'The streets are wet' from (1) 'It rained last night' and (2) 'If it rains, then the streets are wet' amounts thus to 'arriving at the judgement that (3) in part *because* I *take* the presumed truth of (1) and (2) to provide support for (3)' (Boghossian 2012: sec. 3).

Boghossian claims that inference presupposes the 'Taking Condition': 'Inferring necessarily involves the thinker *taking* his premises to support his conclusion and drawing his conclusion *because* of that fact' (Boghossian 2012: sec. 3). Inferring thus involves two aspects: coming to a conclusion and adopting a certain attitude to the conclusion, namely considering it to be true.

I do not want to take a stance on whether Boghossian offers an appropriate account of inference or rather an explanation of how inferences support your beliefs.¹⁵ What is relevant for my discussion are Broome's objections to this account, which captures more or less what Broome means by 'reasoning'. Broome interprets the two aspects in Boghossian's account as amounting to two separate stages of reasoning and thus to a problematic kind of a higher-order account of reasoning. The crucial passage reads:

But if there were these two stages, at the end of the first stage the conclusion would be parked somewhere in your consciousness, without your having any particular attitude towards it. We would have to explain how you then come to take up the attitude. The explanation could not go through your believing you ought to have it, or your intending to have it. How would you come to acquire that belief or that intention? And if you did, how would it bring you to take up the attitude towards the conclusion? It is the higher-order account that claims you come to believe the conclusion this way, and I have rejected that account. (Broome 2013: 243)

This interpretation seems problematic, however. Recall: Broome rejects the higher-order account of reasoning because it gives rise to an infinite

¹⁵ For a critique see e.g. Wright (2012: sec. 1) who objects that Boghossian is not talking about inference, but about 'coming to believe a proposition *on the basis of* inference. That is not inference per se. Inference is rather, one would suppose, a proper ingredient in it'.

regress. But the regress only looms if the linking belief is part of the premise-beliefs, that is to say, if you include the belief in the rule of inference among the premises. Nothing like this is going on in Boghossian's account of inference.¹⁶ All that Boghossian claims is that for inferring you need an awareness of your belief and an attitude to the conclusion – considering it to be true.

This relation to truth is, as several philosophers have pointed out, indispensable for reasoning with beliefs (Velleman 2000; Shah 2003; Shah and Velleman 2005). There is a kind of conceptual tie between belief and truth so that a first-order account of reasoning with beliefs includes your considering whether or not your beliefs are true.

The connection between belief and truth is crucial for distinguishing between a mere logical derivation and reasoning. Think of a logical exercise: you can successfully derive a conclusion from some premises by a valid logical rule, and the conclusion might be false since the premises are false. In logic you follow the rule and endorse it in what Broome calls a weak normative sense. However, in reasoning you are interested in whether your premise-beliefs support your conclusionbelief. Hence taking up a truth-governed attitude to your premise-beliefs and conclusion-belief is indispensable. Here you endorse your premisebeliefs and your conclusion-belief in a strong normative sense.

Interestingly enough, Broome sees all that. He does not deny that reasoning involves those two aspects, namely following a rule and taking up an attitude towards your premise-beliefs and conclusion-belief. However, as his critique of Boghossian shows, he rejects an account of reasoning which considers those two aspects as amounting to two separate stages of reasoning. Broome describes his first-order account of reasoning in the following way:

On the first-order account, reasoning is not split into the two stages. You adopt an attitude as you work out its content. Belief reasoning appears to you as the process of discovering a truth. (Broome 2013: 243)

Broome thus concedes that reasoning includes taking up an attitude to the conclusion. Reflecting on your attitudes and assessing whether you can endorse them or not, is indispensable for reasoning. A consequence is that a first-order account of reasoning invokes reasons. Believing involves, as David Velleman expresses it, 'being subject to reasons' (Velleman 2000: 186).¹⁷ Equally, practical reasoning engages you in reflecting on whether

¹⁶ Boghossian is eager to avoid the regress problem (Boghossian 2012: sec. 6).

¹⁷ And Velleman adds that 'my sensitivity to reasons for believing [...] is not a second-order aim of having true beliefs but rather the first-order aim that makes my acceptance of something into a belief' (Velleman 2000: 186).

you can endorse your intentions and that reflection will depend on the reasons you have for those intentions.

Broome is forced to accept all this. This is apparent when we consider what he says about the 'direction of reasoning' (Broome 2013: 243). You can, he points out, satisfy the *Modus Ponens Requirement* (Rationality requires of *N* that, if *N* believes at *t* that *p*, and *N* believes at *t* that if *p* then *q*, and if *N* cares at *t* whether *q*, then *N* believes at *t* that *q*) in two ways: either by reasoning with modus ponens or by reasoning in the reverse way by modus tollens.

Now, Broome is here not talking merely about the logical validity of modus ponens and modus tollens; he is interested in how theoretical reasoning can make use of those two rules. You can come to a conclusion by modus ponens; however, if you come to the belief that the conclusion is false, modus tollens reasoning brings you to give up the initial premisebelief. '[T]heoretical reasoning', Broome argues, 'will often cause you to drop one or more of your initial beliefs, rather than acquire a new one' (Broome 2013: 243–244). His example is telling. You might reason from the premises (1) 'Platypuses are mammals' and (2) 'If platypuses are mammals, platypuses do not lay eggs' to the conclusion (3) 'Platypuses do not lay eggs'. However, you might not believe the conclusion as you have seen a platypus laying eggs. This belief leads you to reverse your reasoning and (by modus tollens) to drop the belief that platypuses are mammals.

Broome characterizes the reasoning in the platypus case as 'a failed attempt at reasoning by modus ponens, followed by a successful piece of reasoning by modus tollens' (Broome 2013: 244). But this characterization is inaccurate given Broome's own conditions for reasoning. Both pieces of reasoning are successful in terms of coming to a conclusion. The only difference between them is that the conclusion in the modus ponens case is wrong; in the modus tollens case the conclusion is true. However, to call the reasoning by modus ponens a failed attempt of reasoning one has to move beyond mere logical derivation and associate theoretical reasoning with assessing the truth or the falsity of the conclusion. In other words, since both instances of reasoning rely on valid logical rules, the characterization of 'successful' or 'failed' makes sense only if you align reasoning with judging the conclusion on the basis of your evidence (reasons). Boghossian's taking condition – you take the premises to support the conclusion – is just another way of saying this.

That the direction of your reasoning must be backed by reasons also holds for instrumental reasoning, which Broome considers to be the standard case of practical reasoning. The formal structure is: from $\langle e_i$; intention> and $\langle m$ is a means implied by e_i ; belief>, and $\langle m$ is up to me; belief> derive $\langle m_i$; intention> (Broome 2013: 259). You might reason from the intention 'I intend to run and finish the marathon beginning of April' and the belief 'my running 7 miles per day from January to end

of March is a means implied by my running and finishing the marathon beginning of April' together with the belief 'my running 7 miles per day from January to end of March is up to me' to the conclusion 'I intend to run 7 miles daily'. The recognition that you cannot realize your intention to run 7 miles daily because of your professional duties can bring you to drop your intention to run the marathon. Again, a stance on your conclusion is necessary. Practical reasoning involves an assessment of your intentions – whether they are realizable and make sense given your overall situation and context.

The problem is even more striking in the case of enkratic reasoning, i.e. reasoning that meets the requirement of Enkrasia. Broome distinguishes between weak and strong normativity. Weak normativity means complying with some standard or following some rule; normativity in the strong sense involves 'reasons or ought' (Broome 2012: sec. 4). Broome wants to avoid strong normativity in reasoning. With respect to Enkrasia, however, Broome obviously cannot rule out reasons and oughts. He grants that enkratic reasoning involves a second-order belief, a belief about what you ought to do, but he wants the reasoning process to stop there. But the process only stops at the level of the second-order belief if you have an all things considered belief that you ought to *F*. This means, on Broome's own definition, that you have taken all the relevant considerations into account in assessing whether you are justified in holding the belief that you ought to *F*. This assessment depends on the reasons you have for believing you ought to *F*.

In the territory of rationality the belief that you ought to F cannot merely be an arbitrary assumption like the weird premises you might use in logical derivations. It must be a belief that is justified. If not, your reasoning to the intention would not be justified. You have to take the belief that you ought to F to support your forming the intention.

One more point. We have seen that Broome, in developing a firstorder account of reasoning, stays close to the logical rules of reasoning. However, when it comes to enkratic reasoning, Broome moves beyond the rules of logic.

The example of enkratic reasoning he provides is (Broome 2013: 288):

I ought to take a break. So I shall take a break.

Broome then specifies this in more detail. Enkratic reasoning is only correct if it complies with the following rule (Broome 2013: 290):

From

- 1. <I ought that *p*; belief> and
- 2. <It is up to me whether or not *p*; belief> to derive
- 3. *<p*; intention>

The example now runs:

- 1. I ought to take a break.
- 2. It is up to me whether or not I take a break.
- 3. So I shall take a break.

For Broome this is correct enkratic reasoning.

Olav Gjelsvik criticizes Broome's depiction of enkratic reasoning and suggests the following reformulation (Gjelsvik 2013: 474):¹⁸

- 1. I (If I ought to take a break then I shall take a break.)
- 2. B (I ought to take a break.)
- 3. I (I shall take a break.)

Gjelsvik's reformulation aligns enkratic reasoning with following a logical rule. The first premise amounts to an intention (If I ought to take a break then I shall take a break). Together with a belief you then come to a further intention by modus ponens.

In Broome's version you go from two beliefs to an intention. The forming of the intention is hidden in the step from 2 to 3. Believing that it is up to you whether or not you take a break together with your belief that you ought to take a break only brings you to form the intention to take the break in case you are committed to the rule that you will form an intention to *F* in case you belief you ought to *F*. But such a rule is not given to you by logic. Broome's second premise (it is up to me whether or not I take a break) amounts to a volition. Without an act of will you do not get to form the intention-conclusion. This raises the issue of the connection between rationality and agency, a topic which remains largely unexplored in Broome's book.

In *Rationality through Reasoning* Broome makes a determined effort to present an account of rationality that meets challenging criticisms of his earlier attempts. The objections have been that Broome's emphasis on rational requirements turn rationality into an enterprise of formulating agent-neutral abstract norms with no relation to you as an agent. Broome tries to answer those objections. However, in sticking firmly to the project of providing a solely requirement-based account of rationality, Broome ignores the demand for rationality as a form of responding to reasons.¹⁹ The question, however, is not only what requirements rationality asks us

¹⁸ Gjelsvik talks of 'practical reasoning' when referring to Broome's 'enkratic reasoning'.

¹⁹ Broome pays a high price for his commitment to define rationality exclusively as satisfying rational requirements. He thinks he cannot defend the thesis that rationality is normative. But if there is no normative force for satisfying rational requirements, then why should we do so?

to fulfil, but how making use of our reasoning and reflective capacities turns us into rational agents.

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