The Right Thing to Believe?

Ralph Wedgwood

1. The “aim” of belief

Many philosophers have claimed that “belief aims at the truth”. Indeed, this claim is often taken to express a necessary truth, which forms part of the essence of belief itself. As it is sometimes said, truth is the “constitutive aim” of belief. According to this view, the way in which belief “aims at the truth” is one of the distinguishing marks of belief. Thus, for example, some philosophers have suggested that one of the essential features that distinguish beliefs from intentions is that beliefs aim at being true of the world, while intentions aim at making the world true of them.

However, this claim is hardly true in the everyday sense of ‘aim’: beliefs are not little archers armed with bows and arrows; they do not literally “aim” at anything. At best, it is believers that aim at this or that. But it is far from clear that believers have any aim at all concerning most of their beliefs. Some beliefs may be held as a result of a deliberate quest for the truth. But many beliefs (including most of our perceptual beliefs about our immediate environment, and our introspective beliefs, like my belief that I am currently in pain) seem to arise in us unbidden, without any aiming on our part at all.

In what sense then is it true to claim that beliefs essentially aim at the truth? What insight might philosophers be gesturing at when they make this claim? In some of my earlier work (Wedgwood 2002), I have defended a normative interpretation of this claim. According to this interpretation, the claim expresses a normative principle about belief: in effect, it is the

---

1 See e.g. Platts (1979, p. 257); and compare Wiggins (1989, p. 147) and Dummett (1993, pp. 42-52).

2 See Anscombe (1957, p. 56) and Humberstone (1992).
claim that belief is subject to a truth-norm.

In the rest of this essay, I shall explain more precisely what this claim amounts to; I shall also explain how this claim can be developed so that it applies to partial beliefs as well as to flat-out full beliefs. Then I shall analyse and respond to an objection that has been raised against the claim that belief is subject to a truth-norm of this sort by Krister Bykvist and Anandi Hattiangadi (2007). As we shall see, responding to this objection will involve careful reflection on the structure of normative concepts, and on how these normative concepts apply to belief.

2. Correct and incorrect beliefs

What is the normative interpretation of the slogan that “belief aims at the truth”? There are many different normative concepts that apply to belief: that is, there are many concepts applying to belief that are – in ways that we shall explore later – essentially connected to the concepts that are expressed by paradigmatic normative words like ‘ought’. For each of these normative concepts, there are general principles that specify the conditions under which beliefs satisfy this normative concept. In this sense, there are many norms applying to belief.

Among these general norms that apply to belief, there may be some that form part of the very nature or essence of belief; if there are any such norms, they could be called the essential or constitutive norms of belief. Among these constitutive norms, there may be one that counts as the most fundamental constitutive norm. This norm would be the most fundamental in the sense that it plays a crucial role in the explanation of all the other constitutive norms of belief – while none of the other constitutive norms plays such a crucial role in these explanations.

I propose to use the term ‘correct’ in the following way. To say that a belief is “correct” is to say that the belief satisfies this most fundamental of all the essential or constitutive norms that apply to beliefs; and in general to say that an attitude is “correct” is to say that it satisfies the most fundamental norm that applies to attitudes of that type. So, on this interpretation, the slogan that “belief aims at truth” is the claim that the most fundamental of the constitutive norms applying to beliefs is the principle that (to put it roughly) a belief is correct if and only if
the proposition believed is true.³

It is not too hard to see, at least in outline, how this fundamental truth-norm might explain the other constitutive norms of belief. For example, it seems plausible that the notion of a rational belief is also a normative concept: that is, to say that it is irrational for you to hold a certain belief at a certain time is to say that you in a certain sense ought not to hold that belief. It may also be plausible that the principles that articulate the conditions under which beliefs count as rational form part of the essential nature of belief, helping to distinguish belief from other kinds of mental states. So, on these assumptions, the norms of rational belief are also among the constitutive norms of belief. But it may also be that the norms of rational belief are in some way explained by the more fundamental truth-norm that applies to belief.

It may be that one of the requirements of rationality applying to belief is that the propositions that form the contents of one’s beliefs should all be consistent with each other. But why should rationality require consistency in this way? What is bad about having inconsistent beliefs? The explanation may have to appeal to the more fundamental truth-norm that applies to belief. Perhaps, rationality requires consistency because if the contents of one’s beliefs are not consistent, they cannot all be true – thereby guaranteeing that some of one’s beliefs are incorrect. This sort of explanation may be capable of being generalized to all the other requirements of rationality that apply to belief. If so, then it seems plausible that the truth-norm really is the most fundamental of the constitutive norms that apply to belief.

³ Some philosophers will object that this principle is trivial, on the grounds that the claim that a belief is correct just obviously means that the proposition believed is true. I have set out to answer this objection elsewhere (Wedgwood 2007, 157–58).
fundamental fact about belief that beliefs come in degrees: we hold some beliefs with greater confidence than others. Our account of this truth-norm must somehow accommodate this fact.

The best way to do this, I suggest, is to recognize that a belief may deviate or fall short of perfect correctness to a greater or lesser degree – or as I shall put it for short, there are degrees of incorrectness. That is, even if two beliefs are neither of them perfectly correct, one of these beliefs may be more incorrect than the other.4

So a more refined version of this fundamental truth-norm would imply that if a belief is held with maximum confidence, it is perfectly correct if and only if the proposition believed is true. The natural way to extend this principle to beliefs that are not held with maximum confidence would be to say the following: (i) if the proposition believed is false, then the greater the confidence with which you believe that proposition, the more incorrect your belief is; and (ii) if the proposition believed is true, then the greater the confidence with which you believe that proposition, the less incorrect your belief is.5

On this conception, then, this fundamental truth-norm only compares different kinds of belief – that is, different kinds of doxastic or credal attitude – that the believer might have towards a given proposition $p$, comparing these attitudes with respect to the degree of incorrectness that they have. So this norm does not compare the state of having some doxastic attitude towards $p$ with the feature of having no doxastic attitude at all towards $p$. Even a stone or a prime number has the feature of having no doxastic attitude at all towards this proposition $p$, but there is nothing “incorrect” or “wrong” or “mistaken” about the stone’s or the prime

4 Arguably, the statement that one belief is “more incorrect” than another is not really correct English. So, for our purposes, it should be taken as an abbreviation of an idiomatic but more cumbersome statement, such as the statement that the first belief “deviates from perfect correctness to a greater extent” than the second.

5 This idea has been developed in most detail by the formal epistemologists who have devised “scoring rules” that give a score to sets of partial credences based on their “closeness to the truth”; see especially Joyce (1998).
number’s having this feature.

Still, in understanding this fundamental norm, we should understand the notion of a “doxastic attitude” broadly. For example, in addition to the state of believing a proposition \( p \), and the state of having some particular level of confidence in \( p \), there may also be a state of disbelieving \( p \); presumably, the state of disbelieving \( p \) is correct if and only if \( p \), the proposition disbelieved, is false.

Moreover, whenever a thinker considers a proposition \( p \), the thinker automatically has what at least in a broad sense counts as a “doxastic attitude” towards \( p \). In other words, as soon as you have considered a proposition, you cannot escape having some doxastic attitude towards it. Presumably, if you consider a proposition \( p \) and neither believe nor disbelieve \( p \), then your doxastic attitude towards \( p \) cannot be perfectly correct – since among the possible doxastic attitudes towards \( p \) that you might have, the perfectly correct attitude would be to have either maximum belief in \( p \) when \( p \) is true or maximum disbelief in \( p \) when \( p \) is false.

Equally, if you consider a proposition \( p \), and neither believe nor disbelieve \( p \), your doxastic attitude towards \( p \) cannot be maximally incorrect either – since the maximally incorrect attitude to have towards \( p \) would be either to believe \( p \) when \( p \) is false or to disbelieve \( p \) when \( p \) is true. Instead, if you consider \( p \) and neither believe nor disbelieve \( p \), your doxastic attitude towards \( p \) must have an intermediate level of correctness – somewhere between the perfect correctness of getting \( p \)’s truth-value exactly right and the maximal incorrectness of getting \( p \)’s truth-value totally wrong.

Here is a more precise model that could capture this idea. Suppose that your belief-system can be represented by a set of precise real-valued credence functions. (These credence functions may have to be partial functions, to allow for “gaps” – that is, for the propositions towards which you have absolutely no attitude at all.) For every proposition \( p \), let \( v(p) \) be the truth-value of \( p \): so \( v(p) = 1 \) if \( p \) is true, and \( v(p) = 0 \) if \( p \) is false. Then the Brier score of your credence \( C(p) \) in \( p \) is the square of the distance between this credence and the truth-value — i.e., \( |v(p) - C(p)|^2 \).
According to this model, your doxastic attitude towards a proposition \( p \) receives an “incorrectness-score” corresponding to the average Brier-score of the credences that can represent that attitude.\(^6\) So, for example, this model has the following implications:

a. Maximum belief in \( p \) when \( p \) is true, and maximum disbelief in \( p \) when \( p \) is false, both get the perfect “incorrectness score” of 0 (that is, they are not incorrect at all).

b. Maximum belief in \( p \) when \( p \) is false, and maximum disbelief in \( p \) when \( p \) is true, both get the worst possible “incorrectness score” of 1 (that is, they are totally incorrect).

c. Considering \( p \) but having no definite belief towards \( p \) is in a sense the most indeterminate possible attitude that you can have towards \( p \), which can be represented by means of the set that includes all possible credences between 0 and 1 in \( p \); regardless of whether \( p \) is true or false, this attitude will always get the intermediate “incorrectness score” of 1/3 (that is, the average value of \( x^2 \) for all real numbers between 0 and 1).

Much further work will have to be carried out to investigate which features of this model reflect the real nature of these degrees of incorrectness, and which are merely artifacts of the mathematical machinery that has been employed. For our purposes, however, it is enough that we have made it clear that there is no difficulty in extending the general idea of this fundamental truth-norm to all these different kinds of belief.

In the rest of this paper, I shall evaluate the claim that belief is subject to a fundamental truth-norm of this sort. Given my interpretation of what it is for a norm to be “fundamental” in the relevant sense, a complete defence of this claim would require arguing that this truth-norm really is the fundamental norm applying to belief, by showing how this norm can explain all the other constitutive norms that apply to beliefs. I shall not attempt to give such a complete defence of this claim here.\(^7\) I shall simply respond to the objection that has been raised against

---

\(^6\) For a discussion of the Brier score, see especially Joyce (2009).

\(^7\) For some first steps towards providing such a defence, see Wedgwood (2011).
this claim by Bykvist and Hattiangadi (2007). The response to this objection will help us to achieve a better understanding of these normative concepts of “correct” and “incorrect” beliefs.

4. Bykvist and Hattiangadi’s objection

Bykvist and Hattiangadi focus on my claim that the fundamental norm applying to belief is the principle that a belief in a proposition $p$ is correct if and only if that proposition $p$ is true. They say that if my use of the term ‘correct’ is a genuinely normative use (as I say it is), then this norm must entail a principle that can expressed using paradigmatically normative terms like ‘ought’.

According to my suggested interpretation of the truth-norm, there need be nothing incorrect about simply having no attitude whatsoever towards a proposition – such as a proposition that you have never even considered. However, when you do consider a proposition $p$, then you cannot escape having some doxastic attitude towards $p$, and that attitude will fall short of being perfectly correct unless it is an attitude of believing $p$ while $p$ is true or an attitude of disbelieving $p$ while $p$ is false.

This is why Bykvist and Hattiangadi (2007, 280) suggest that the most plausible way to capture my conception of this fundamental truth-norm by using terms like ‘ought’ is as follows:

\[(1) \text{ For all } S, p: \text{ if } S \text{ considers } p, S \text{ ought to (believe } p) \text{ if and only if } p \text{ is true.}\]

Then Bykvist and Hattiangadi point out that there are propositions for which this thesis (1) is clearly false. The propositions in question are Moore-paradoxical propositions – such as the proposition that you might express by uttering a first-personal sentence of the form ‘$p$ and I don’t believe that $p$’ – for example, ‘It is raining and I don’t believe that it is raining’.

Suppose that you consider the proposition that you might express by means of this sentence. It is clear that this proposition might very well be true: that is, it might very well be true that it is raining and you do not believe that it is raining. Nonetheless, it seems that it is not
true that you ought to believe this proposition. At least given the assumption that belief distributes over conjunction (so that if you believe \( p \& q \), you also believe \( p \)), this proposition cannot be both true and believed. So if you believe this proposition, you thereby believe something false; and if believing something false is always wrong or incorrect, then believing this proposition will be wrong or incorrect. So, if there is any sense of the term ‘ought’ that captures the idea that we ought not to have beliefs that are wrong or incorrect in this way, it seems that it cannot be true in this sense that you ought to believe this Moore-paradoxical proposition – even though the proposition is true, and you are considering it. So it seems that this thesis (1) cannot be true.

A proponent of this principle (1) might try weakening it to the following:

(2) For all \( S, p \): if \( S \) considers \( p \), and it is possible for \( S \) to believe \( p \) at the same time as \( p \) is true, then \( S \) ought to (believe \( p \)) if and only if \( p \) is true.

As Bykvist and Hattiangadi (2007, 282) point out, however, this principle is too weak, at least for my purposes. The fundamental truth-norm applying to belief is meant to play a basic role in explaining all of the other normative truths that apply to beliefs as such. But (2) seems incapable of explaining what attitudes we should have towards propositions that cannot be both true and believed (like Moore-paradoxical propositions of the form ‘\( p \) and I don’t believe that \( p \)’). As Bykvist and Hattiangadi note (2007, 282), it seems intuitively plausible that there is such a thing as “the right response” to any such Moore-paradoxical proposition: “you should not believe it even if it is true.” But as they explain, (2) “cannot capture this.” Bykvist and Hattiangadi conclude that these problems cast doubt on the idea that there is a genuinely normative principle that requires us to believe truths.

The problems raised by Bykvist and Hattiangadi all concern theses that (like (1) and (2)) are formulated by means of words like ‘ought’. The principle that I wish to defend, however, is formulated with the word ‘correct’. In the rest of this essay, I shall try to explain
how statements about which beliefs are “correct” are related to statements about what we
“ought” to believe. Once we understand this relation correctly, then we will see that my central
does not entail any theses that are vulnerable to these problems.

5. *Ex post and ex ante normative assessments*

To understand these normative concepts correctly, we must distinguish two kinds of normative
assessments. Specifically, we must distinguish between what I shall call “ex post” and “ex ante”
normative assessments. (This distinction is related to a distinction that has been discussed
among ethicists, between “prospective” and “retrospective” assessments of actions. But I shall
stick with the terminology of “ex ante” and “ex post” normative assessments here.)

This distinction, between *ex post* and *ex ante* normative assessments, is perhaps most
familiar in the case of assessments of “justified” or “rational” belief. So far as I know, it was
Alvin Goldman who first introduced the distinction between *ex post* and *ex ante* uses of the term
‘justified belief’. This is how Goldman (1979, 21) put it: “The *ex post* use occurs when there
exists a belief, and we say of that belief that it is (or isn’t) justified. The *ex ante* use occurs when
we … ignore … whether such a belief exists. Here we say of the person … that *p* is (or isn’t)
suitable for him to believe.” As Goldman explains the distinction, the most important difference
between *ex post* and *ex ante* uses of ‘justified belief’ is that the *ex post* statement ‘Your belief in
*p* is justified’ entails that you actually believe *p*, whereas the *ex ante* statement ‘There is
justification for you to believe *p*’ does not entail that you actually believe *p*.

In more recent epistemological discussions, this distinction has come to be expressed by
means of the distinction between “doxastic” and “propositional” justification – where “doxastic
justification” is picked out by what Goldman originally called the “*ex post* use of ‘justified’”,
and “propositional justification” is picked out by what Goldman called the “*ex ante* use of
‘justified’”.

---

8 For a recent discussion of “propositional” and “doxastic” justification, see Turri (2010).
the very same distinction can be drawn with respect to rational action as well. We can make an *ex post* statement, of the form ‘A’s φ-ing is rational’, which entails that A actually does φ; and we can also make an *ex ante* statement, of the form ‘It is rational for A to φ’, which does not entail that A actually does φ – only that φ-ing is, in the relevant way, a suitable thing for A to do.

Moreover, this distinction is also not restricted to assessments about justification or rationality. We can distinguish between the *ex ante* (or prospective) assessment ‘It is right for you to φ’ and the *ex post* (or retrospective) assessment ‘Your act of φ-ing is right’. The latter *ex post* assessment entails that you actually do φ, while the former *ex ante* assessment does not. So this distinction appears everywhere throughout the normative domain.

Now, the term ‘ought’ seems always to express an *ex ante* assessment. Deontic logicians all agree, after all, that the T axiom – ‘O(p) → p’ – is not a logical truth for any normal kind of ‘ought’. Indeed, ‘ought’ seems particularly closely related to the *ex ante* uses of terms like ‘right’ and ‘wrong’. To say that it is (*ex ante*) *not right* for a person to φ seems to come to the same thing as saying that in some corresponding sense of the term, the person *ought not* to φ. So ‘ought’-judgments belong with the *ex ante* or prospective assessments.

Nonetheless, even though the proposition that is embedded inside the ‘ought’-operator does not have to be true for the whole ‘ought’-statement to be true, many ‘ought’-statements refer, at least implicitly, to the situation that some person is in at a certain time. We might say, for example, that in your current actual situation you ought not to believe a given proposition p. This statement concerns a certain class of possibilities – namely, the possibilities that are in some relevant way available from your current actual situation. The point of this statement is to draw attention to a certain *favoured subset* of those possibilities, and to say that throughout this favoured subset of the relevantly available possibilities, you do not believe p. Intuitively, this favoured subset of the available possibilities consists of those possibilities in which the doxastic

---

9 Compare the account of the semantics of ‘ought’ that I gave in my earlier work (Wedgwood 2007, Chap. 5, Section 5.1).
attitudes that you have towards the propositions that are in question are in the relevant way fitting or appropriate.

A parallel point applies to ex ante statements about what you “may permissibly” believe. ‘You may permissibly believe $q$’ is true if and only if there is some available possibility belonging to the relevant favoured subset in which you believe $q$ – that is, an available possibility in which (a) your doxastic attitudes towards the propositions in question are in the relevant way fitting or appropriate, and (b) you believe $q$.

Presumably, these “favoured” possibilities, in which your doxastic attitudes towards these propositions really are “fitting or appropriate” in the relevant way, are possibilities in which a corresponding ex post or retrospective normative assessment is true. Thus, for example, the statement that we have just considered ‘You ought not to believe $p$’ is true if and only if you do not believe $p$ in any possibility (within the relevant domain of available possibilities) at which your doxastic attitudes towards the propositions in question are (ex post or retrospectively) fitting or appropriate.

As we shall see, this conception of the relationship between ex post and ex ante normative assessments can be used to tease out the implications of my claim about when beliefs count as “correct” for questions about what we “ought” to believe, or about what we “may permissibly” believe.

6. The correctness-related sense of ‘ought’

Let us return now to my claim that the fundamental norm applying to belief is the principle that a belief counts as correct if and only if the proposition believed is true. It seems to me that this principle is best understood as a thesis about when beliefs can be truly described as being ex post or retrospectively “correct”, not as a thesis about when it is ex ante or prospectively right or fitting to believe a proposition.

For the rest of this discussion, I shall simplify matters by ignoring all other kinds of belief other than (i) outright beliefs – that is, beliefs that are held with full confidence – and (ii)
the kind of attitude that one has towards a proposition \( p \) when one considers \( p \) but has no definite belief towards \( p \) at all. Let us assume that the state of disbelieving a proposition \( p \) can simply be identified with the state of having an outright belief in the negation of \( p \), and that the state of suspending judgment about \( p \) can be identified with the state of considering \( p \) but having no definite belief towards \( p \). (These assumptions are probably not exactly right, but they should be close enough to the truth for our present purposes.) Otherwise, I shall simply ignore all the other kinds of beliefs or doxastic attitudes that one might have. So, in particular, I shall ignore such doxastic states as partial credences, and the qualitative state of being more confident of one proposition than of another, and the like.

Given these simplifying assumptions, the fundamental norm of correctness applying to beliefs can be summed up as the conjunction of the following three general propositions:

a. The state of having an outright belief in \( p \) when \( p \) is true is a perfectly correct belief.

b. The state of having an outright belief in \( p \) when \( p \) is false is a maximally incorrect belief.

c. The state of suspending judgment about \( p \) has an intermediate value, somewhere in between the perfect correctness of believing \( p \) when \( p \) is true and the extreme incorrectness of believing \( p \) when \( p \) is false.

Every instance of these three general propositions is an ex post assessment of a doxastic attitude that a thinker actually has towards a specific proposition \( p \). Together, these three propositions specify when such belief-states are perfectly correct, when they are maximally incorrect, and when they have this intermediate level of correctness. Moreover, given our simplifying assumptions, and the assumption of bivalence (that is, the assumption that the proposition \( p \) must be either true or false), these three general propositions cover absolutely all doxastic attitudes that the thinker might have towards this proposition \( p \).

Given this principle about which beliefs count as (ex post) correct, we can use the connection that I postulated in the previous section between ex post and ex ante normative
assessments to derive conclusions about what propositions we “ought” to believe, or about what propositions we “may permissibly” believe. Admittedly, these conclusions will employ a somewhat special use of the terms ‘ought’ and ‘may’ – specifically, a sense that we could call the “correctness-related” sense; but it seems that it is perfectly possible to use the terms ‘ought’ and ‘may’ in this sense.

According to the connection that I postulated between ex post and ex ante normative assessments, a statement of the form ‘You may permissibly φ’ is true if and only if there is some “relevantly available possibility” in which you φ and the relevant ex post assessments of fittingness or appropriateness are true. So to make use of this connection, we need to identify the relevant domain of “possibilities” that count as “available” from the situation that you are in at the relevant time t.

There seems to be no reason why there should not be several different concepts of “availability”, each of which might be relevant in some contexts where the term ‘ought’ is used; these different concepts of “availability” correspond to a range of different concepts that could be expressed by ‘ought’ in these contexts. But to fix ideas, I shall identify a particular concept of availability, which seems to yield intuitively plausible truth-conditions for this use of ‘ought’.

The key point for this concept of the possibilities that are “available” to you at a certain time t is that at this time t, you have certain capacities for thinking and reasoning in various ways, and certain opportunities for exercising those capacities. The relevantly available possibilities are those that are available to you through the way in which you avail yourself of these opportunities for exercising these capacities at t.

So, for every way W of exercising these capacities such that you have an opportunity for exercising these capacities in way W at t, there is an available possibility in which you exercise your capacities in that way W at t. In addition, for each of these ways of exercising your capacities W, and each proposition p such it is true in the actual world that if you were to exercise your capacities in way W, p would be true, all the available possibilities in which you exercise your capacities in way W must also be possibilities in which p is true. In general, a
possibility is “relevantly available” if and only if there is a way of reasoning or thinking open to you at $t$ such that, if you were think in that way at $t$, that possibility would be realized. Otherwise, however, all of these possibilities are as much like the actual world as possible. So, in particular, all facts about how your mental life was in the past before $t$ are exactly as they are in the actual world; and all the facts that are causally independent of the way in which you exercise these capacities at $t$ are also exactly as they are in the actual world.\textsuperscript{10}

What is it for one of these “relevantly available” possibilities to belong the “favoured subset” of this domain? I shall suppose that in every context in which we talk about what you “ought” to believe at a given time (in this correctness-related sense of ‘ought’), there are certain propositions that are in question. In many contexts, the “propositions that are in question” will include all the propositions that you are actually considering at the relevant time, although in some contexts they may include other propositions as well (and there might even be some contexts in which the propositions in question do not include the propositions that you are considering at the time).\textsuperscript{11} The favoured subset of the domain consists of the possibilities where your doxastic attitudes towards the propositions in question have the lowest degree of incorrectness – that is, they are no more incorrect than the attitudes that you have towards these propositions in any other possibility in this domain.

\textsuperscript{10} Moreover, given my understanding of what it is for a possibility to be “available”, this is true even on a weak interpretation of ‘causal independence’, according to which a true proposition $p$ is causally independent of how you exercise your capacities if and only if there are no two ways of exercising your capacities $W_1$ and $W_2$ open to you such that if you exercised your capacities in way $W_1$, $p$ would be true, and if you exercised your capacities in way $W_2$, $p$ would not be true.

\textsuperscript{11} It is important that the “propositions in question” do not include absolutely all propositions, since otherwise my account would imply that every thinker ought to believe all truths. Still, there may be contexts in which it is true to say, of some proposition $p$ that you have not actually considered, ‘You ought to believe $p$’; so in these contexts, the “propositions that are in question” must include $p$ even though you have not actually considered $p$. 
We can use the model that was sketched in the previous section to measure the degree of incorrectness that your doxastic attitudes towards these propositions have. If your attitude of belief or disbelief towards a proposition is perfectly correct, we can assign that attitude an incorrectness score of 0; if your attitude of belief or disbelief towards a proposition is totally incorrect, we can assign that attitude an incorrectness score of 1; and if your attitude towards a proposition is suspension of judgment, we can assign that attitude the intermediate incorrectness-score of 1/3. We can then simply add up the incorrectness-scores that you get for each of the propositions that are in question to obtain your overall incorrectness-score for those propositions. The favoured subset of the relevantly available possibilities consists of the possibilities in which you get the lowest overall incorrectness-score for your doxastic attitudes towards these propositions. That is, a possibility belongs to this favoured subset if and only if there is no other available possibility in which you get a lower incorrectness-score for these propositions: in the favoured possibilities, your attitudes towards these propositions are no more incorrect than in any of the other available possibilities.

This conception of the relevantly “available” possibilities and of the relevant “favoured subset” of these possibilities allows us to derive a number of conclusions about what we “ought” to believe, or “may permissibly” believe, in this correctness-related sense. First, suppose that you are in a situation in which you have considered a proposition $p$, and there is a relevantly available possibility in which you believe $p$ and that belief is perfectly correct – that is, an available possibility in which $p$ is true, and you believe $p$. Then, in the correctness-related sense of ‘permissibility’, this is a case in which it is permissible for you to believe $p$.

These cases in which it is permissible (in this correctness-related sense) for you to believe $p$ include both (i) cases where the proposition $p$ will be true independently of how you exercise your thinking and reasoning capacities, and (ii) cases where there is a way of exercising these capacities open to you such that if you were to believe $p$ as a result of this way of exercising your capacities, $p$ would be true. In either case, there is a relevantly available possibility in which your doxastic attitudes towards the propositions in question are perfectly
correct, and you believe \( p \) – which is enough to make it permissible for you to believe \( p \).

Secondly, suppose that you are in a situation in which there is no relevantly available possibility in which you correctly believe \( p \) – that is, no available possibility in which you believe \( p \) and thereby believe the truth. Then in the relevant sense, it is not “permissible” for you to believe \( p \) – that is, you ought not to believe \( p \). This includes both (i) cases in which the proposition \( p \) will be false anyway, independently of how you exercise your thinking and reasoning capacities, and (ii) cases in which the truth-value of \( p \) depends on your thinking or reasoning but there is no way of thinking or reasoning open to you such that if you believed \( p \) as a result of thinking in this way, \( p \) would be true.

Given our conception of the domain of relevantly available possibilities, these two conclusions cover all the propositions that you have considered, whatever they may be: that is, these principles guarantee that for every proposition \( p \) that you have considered, either it is permissible for you to believe \( p \), or else it is not permissible for you to believe \( p \).

It is plausible that the terms ‘ought’ and ‘may’ are duals of each other. That is, a statement of the form ‘You may permissibly \( \varphi \)’ is true if and only if the corresponding statement ‘It is not the case that you ought not to \( \varphi \)’ is also true. If this is right, then a specification of the truth-conditions of statements about what you may permissibly believe will immediately entail a specification of the truth-conditions of statements about what you ought to believe. Thus, given what I have proposed, it follows that ‘You ought to believe \( p \)’ is true, in the correctness-related sense of ‘ought’, if and only if all of the relevantly available possibilities in which you have the least incorrect beliefs possible in the propositions in question are ones in which you believe \( p \).

Finally, I have proposed that suspending judgment about \( p \) (which I am here identifying with the state of considering \( p \) but having no definite belief towards \( p \)) always has an intermediate value, between the perfect correctness of believing a true proposition and the extreme incorrectness of believing a false proposition. In this way, suspension of judgment is always inferior to the perfectly correct state of believing what is true (although it is superior to the totally incorrect state of believing what is false). So, in fact, the only cases in which it is, in
this correctness-related sense, “permissible” for you to suspend judgment about \( p \) are cases where all the relevantly available possibilities in which you have the least incorrect doxastic attitudes towards the propositions in question are ones in which you suspend judgment about \( p \). They cannot be cases where there is an available possibility in which you either believe \( p \) or believe the negation of \( p \) and thereby believe a truth: if there were such a possibility, this would be a possibility in which your doxastic attitudes are less incorrect than they are in the possibility in which you suspend judgment about \( p \) – in which case no possibility in which you suspend judgment is one in which you have the least incorrect doxastic attitude available towards \( p \).

In effect, this means that the only cases in which suspension of judgment is (in this correctness-related sense) a permissible attitude to take towards \( p \) are cases where there is no way of thinking or reasoning available to you that will ensure either that if you believed \( p \) as a result of this way of thinking, \( p \) would be true, or that if you believed the negation of \( p \) as a result of this way of thinking, the negation of \( p \) would be true. For example, this will happen if any belief in either the proposition or in its negation is “self-falsifying”. One instance of this is the self-referential proposition, “I do not believe this very proposition” – since this proposition cannot be correctly believed, and it can only be correctly disbelieved if it is simultaneously (and incorrectly) believed.\(^{12}\) Another instance of this is the case in which a powerful demon is going to ensure that whatever proposition you believe will be false. In these cases, suspension of judgment is permissible: indeed, since suspension of judgment is the only permissible doxastic attitude in these cases, these are also cases in which you ought to suspend judgment about the relevant proposition.

These three conclusions together imply that for every proposition \( p \) that it is possible for you to believe or to suspend judgment about, there is a permissible attitude for you to take towards the proposition. Belief in \( p \) will be permissible if either \( p \) is true independently of how you exercise your capacities for thinking, or there is some way of thinking open to you such that

\(^{12}\) For a discussion of these “doxastic paradoxes”, see Burge (1984).
if you believed $p$ as a result of that way of thinking, $p$ would be true. Belief in the negation of $p$ will be permissible if either $p$ is false independently of how you exercise your capacities for thinking, or there is some way of thinking open to you such that if you believed the negation of $p$ as a result of thinking in that way, the negation of $p$ would be true. Suspension of judgment will be permissible if neither of those two conditions holds. This picture is, moreover, clearly motivated by the fundamental principle about when beliefs count as correct or incorrect, together with the proposals that I have made about how ex post normative assessments are related to the corresponding ex ante assessments that are expressed using terms like ‘ought’.

Admittedly, this picture has some interesting consequences. Perhaps the most striking consequence is that there can be cases in which it is permissible to believe $p$ and also permissible to believe the negation of $p$. This will happen in some rather unusual cases of self-verifying beliefs, where there is both a way of thinking open to you such that if you were to believe $p$ as a result of that way of thinking, $p$ would be true, and also a way of thinking open to you such that if you believed the negation of $p$ as a result of thinking in this way, the negation of $p$ would be true. (For example, there might be a demon keeping track of your reasoning who will ensure that $p$ would be true if you believed $p$, and that the negation of $p$ would be true if you believed the negation of $p$.)

Since it presumably can never be permissible to believe both $p$ and its negation, it follows that the ‘permissibility’ operator does not agglomerate over conjunction: ‘It is permissible for you to $\varphi$’ and ‘It is permissible for you to $\psi$’ do not jointly entail ‘It is permissible for you to $\varphi$ and $\psi$’. But we should never have expected the permissibility-operator to agglomerate. It is permissible for Buridan’s Ass to go to the bale of hay on the Left, and it is also permissible for the Ass to go to the bale of hay on the Right, but it is not permissible for the Ass both to go to the Left and to go to the Right.

Some philosophers might suggest that although statements about what it is “permissible to do” do not agglomerate in this way, statements about what it is “permissible to believe” must be different. Prima facie, however, one would expect all the concepts that can be expressed by
the term ‘permissible’ to have the same basic logic. So I see no reason to think that ‘permissible’ would agglomerate over conjunction in this case, given that it clearly does not agglomerate in other cases. In general, the semantic proposals that I have made here clearly imply that the logic of permissibility will have to be broadly similar to the logic of possibility, and it is obvious that ‘It is possible that p’ and ‘It is possible that q’ do not jointly entail ‘It is possible that p and q’. So it seems that agglomeration is not a plausible principle for any kind of permissibility.

7. **Reply to Bykvist and Hattiangadi**

The picture that I have outlined above reveals how we should respond to the objections of Bykvist and Hattiangadi. Consider the Moore-paradoxical proposition ‘p and I don’t believe that p’. Evidently, the truth-value of this proposition is not independent of how I exercise my capacities for thinking. Since this proposition cannot be both true and believed, there is no way of thinking or reasoning open to me in my current situation such that if I believed this proposition as a result of thinking in that way, this proposition would be true. So it is not permissible for me to believe this proposition, even if it is actually true.

In fact, on certain natural assumptions, if this Moore-paradoxical proposition is true, it is permissible for me to **disbelieve** it. Indeed, if it is true, I **ought** to disbelieve it. The point is somewhat tricky, and so it is worth exploring carefully.

Suppose that this proposition is in fact true in the actual world w*. Let us also assume that in the context in which we are talking about what I ought to believe, all of the following three propositions are “in question”: the conjunctive proposition ‘p and I don’t believe that p’, and its two conjuncts, p, and the proposition ‘I don’t believe that p’. Finally, let us assume that the truth-value of p is independent of how I think at the relevant time.

Since ‘p and I don’t believe p’ is true, p must clearly also be true. Since the truth of p is independent of how I think at the relevant time, there is a relevantly available possibility in which p is true and I believe p. The “favoured subset” of the relevantly available possibilities
must be a set in which I have the least incorrect doxastic attitudes that are possible towards all the propositions that are in question – including this proposition \( p \). So, it seems, if there is any relevantly available possibility in which I have a perfectly correct doxastic attitude towards all the propositions that are in question, this must be a possibility in which I believe \( p \).

Since I believe \( p \) in all these possibilities, if there are any of these possibilities in which I also have a perfectly correct attitude towards the proposition ‘I don’t believe that \( p \)’, my attitude towards that proposition in those possibilities must be disbelief; so if there are any of these possibilities in which I also have a perfectly correct attitude towards the conjunctive proposition ‘\( p \) and I don’t believe that \( p \)’, that attitude must also be disbelief. So it seems that there are some relevantly available possibilities in which I have perfectly correct attitudes towards all three propositions (\( p \), ‘I don’t believe that \( p \)’, and ‘\( p \) and I don’t believe that \( p \)’); but they are all possibilities in which I believe \( p \), and disbelieve both ‘I don’t believe that \( p \)’ and the conjunction ‘\( p \) and I don’t believe that \( p \)’.

This might seem puzzling: after all, we are assuming that the conjunction ‘\( p \) and I don’t believe that \( p \)’ is true in the actual world \( w^* \). So how can it be permissible to disbelieve it? The answer is that the truth of this proposition in the actual world, along with the assumption that I am considering the proposition \( p \), entails that my beliefs are not as they ought to be in the actual world. The relevantly available possibilities in which I believe as I ought to believe are all distinct from the actual world, and – more specifically – they are possibilities in which this Moore-paradoxical proposition is not true.

In this respect, Moore-paradoxical propositions are similar to propositions that explicitly imply that the believer’s attitudes towards the propositions in question fall short of being perfectly correct – like the proposition (if it exists) that I could express by the sentence ‘I falsely believe this very proposition’. Some philosophers might be tempted to deny that this sentence express any proposition at all.\(^{13}\) But other philosophers will argue that it seems

\(^{13}\) For this approach towards these paradoxical sentences, see for example Prior (1971, 88).
possible to consider this proposition, and if the proposition can be considered it must exist. If I do consider this proposition, then I clearly ought not to believe it, since there is no available possibility in which I believe this proposition and it is true. In any possibility in which I do not believe this proposition, this proposition is straightforwardly false, and so the only way to have a perfectly correct doxastic attitude towards that proposition in that possibility is by disbelieving it. So in fact, if I consider this proposition, I ought to disbelieve it.\(^\text{14}\) The only difference between this proposition ‘I falsely believe this very proposition’ and the Moore-paradoxical proposition ‘\(p\) and I don’t believe that \(p\)’ is that the former proposition cannot be true at all, whereas the latter proposition can be true (so long as it not believed).

At the same time, my account allows that it can be true to say that one “ought” to believe a preface-like proposition, like ‘Some of my beliefs are false’. My account allows this because I am not assuming that “the propositions in question” must include all the propositions that one has ever considered. In some contexts, the propositions in question include only those that the believer has recently considered. In these contexts, the “available possibilities” include possibilities in which the believer has various different doxastic attitudes towards the propositions in question, but they do not include any possibilities in which the believer’s doxastic attitudes towards other propositions are different from what they actually are. So in these contexts, the proposition ‘Some of my beliefs are false’ will be true in all of the available possibilities, and all the possibilities in which one’s attitude towards this proposition is as correct as possible will be possibilities in which one believes it. So in these contexts it is true to say that one “ought” to believe this proposition.

\(^{14}\) In fact, although it is arguable that this proposition can be disbelieved, this proposition cannot be believed. For, if it were believed, then since it obviously cannot be both believed and true, it would have to be both believed and false. But this is precisely what the proposition says – that it is both believed and false – so it seems that the proposition would have to be true as well as false. Thus, on pain of paradox, this proposition cannot be believed at all.
The account that I have given here makes the truth-conditions of a statement about what one “ought” to believe highly sensitive to which propositions are (as I have been putting it) “in question” in the context in which the statement is made. For example, suppose that the proposition ‘\( p \) and I don’t believe that \( p \)’ is true, but in the context in which the term ‘ought’ is used, the propositions that are “in question” include neither \( p \) nor the conjunctive proposition ‘\( p \) and I don’t believe that \( p \)’, but only the proposition ‘I don’t believe that \( p \)’. Then there is at least one relevantly available possibility in which I have perfectly correct doxastic attitudes towards all the propositions that are in question, and I believe ‘I do not believe that \( p \)’. So in this context it is true to say that it is permissible for me to believe ‘I don’t believe that \( p \)’. In this way, the account that I have given here implies that there are contexts in which it is true to say of this case that it is permissible for me to believe ‘I don’t believe that \( p \)’, even though it also implies that there are also other contexts in which (because the proposition \( p \) is in question in those contexts), I ought not to believe ‘I don’t believe that \( p \)’.

This feature of my account might seem to make it impossible for this kind of ‘ought’ to play any interesting role in guiding our thinking. If I am asking what to believe, it hardly seems useful for me to be told merely that in one sense I may permissibly believe \( q \) and in another sense I may not! In fact, however, in any context in which one asks what one “ought” to believe, there will already be certain propositions that are in question, which will help to define the precise concept that ‘ought’ expresses in this context. In this context, if one makes a judgment (about what one ought to believe) involving that precise concept, it will be that judgment that will guide one’s thinking. Typically, in a context of this sort, the propositions that are in question are precisely the propositions that one has considered in that context, since it is precisely about these propositions that one is seeking to make up one’s mind. (It is for this reason that I suggested in the previous section that in many contexts, the propositions that are in question include those that the relevant thinker has considered; this is the case in any context in which the speakers using terms like ‘ought’ are focusing on the questions that the thinker herself is considering.)
In general, the truth about what one ought to believe depends on the problem to which the various possible beliefs that one might have are candidates for being the solution. It is not surprising that different problems may call for different solutions, and that there is no set of beliefs that solves all possible problems. So it is not in any way a defect of the account that I have given here that what it is true to say about what we “ought” to believe depends in many cases on which propositions are in question in the context in which the term ‘ought’ is being used.

In conclusion: it seems that the claim that beliefs are subject to a fundamental truth-norm can be defended against the sorts of objections that Bykvist and Hattiangadi have developed. The key to this defence lies in careful attention to the semantics of normative concepts, and in particular to the distinction between ex post and ex ante normative assessments.15

---

15 Earlier versions of this paper were presented at a conference on the Aim of Belief at the University of Oslo, and at Victoria University in Wellington and the University of Auckland. I am grateful to those audiences, and also to Krister Bykvist, for some extremely helpful comments. The first draft was written during my tenure of a Research Fellowship from the Leverhulme Trust, to whom I should also express my gratitude.
References


