

# Three ways in which logic might be normative\*

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**Abstract:** Logic, the tradition has it, is normative for reasoning. Famously, the tradition was challenged by Gilbert Harman who argued that there is no straightforward connection between logical consequence and norms of reasoning. A number of authors (including John MacFarlane and Hartry Field) have sought to rehabilitate the traditional view of the normative status of logic against Harman. In this paper, I argue that the debate as a whole is marred by a failure of the disputing parties to distinguish three different types of normative assessment, and hence three distinct ways in which the question of the normativity of logic might be understood. Logical principles might be thought to provide first-personal directives to the reasoning agent, they might be thought to serve as third-personal evaluative standards, or they might underwrite our third-personal appraisals of others whereby we attribute praise and blame. I characterize the three normative functions in general terms. I then show how a failure to appreciate this three-fold distinction has impeded progress since it has led the participants in the debate to talk past one another. Moreover, I show how the distinction paves the way for a more fruitful engagement with the issue.

## 1 Introduction

Logic, the tradition has it, is normative. As Frege put it, logic ‘prescribe[s] universally how one ought to think if one is to think at all’ (Frege 1893/1903/2009, p. xv). At least on the face of it, our intuitions accord with the tradition. It’s a bad thing, we tend to think, to be

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inconsistent. Similarly, we criticize people for failing to appreciate at least the more obvious logical consequences of their beliefs when these are in question. Logic might thus be thought to have a normative role to play in reasoning—i.e. in the ways we go about forming and revising our doxastic attitudes and in our evaluations of the reasoning of others. Call the thesis that logic has such a role to play the *Normativity Thesis* (NT).<sup>1</sup>

NT has come under heavy fire. Gilbert Harman, in a number of influential writings, has questioned the notion that there really is any interesting connection between logic and norms of reasoning.<sup>2</sup> In recent years, others have sought to defend NT against Harman’s skeptical challenge.<sup>3</sup> I ultimately side with NT’s defenders. However, I believe that before we can hope to make any significant headway on the question of NT’s tenability, we must get clearer on what it is that we are asking when we are asking after the normativity of logic. This paper attempts to undertake this clarificatory task. Its central claim is that there are in fact three importantly different ways in which logic might be thought to be normative. To wit,

- logical norms might provide first-personal *directives* that guide the reasoner;
- logical norms might serve to make third-personal *evaluations*, setting standards or ideals by which to assess an agent’s doxastic state for its logical cogency; or, finally,
- logical norms might play the role of third-personal *appraisals* by which we criticize, blame or otherwise hold accountable an agent for her doxastic conduct.

Instead of the one question concerning NT’s status, on my picture we have three questions on our hands. This, I submit, is progress. It allows us to replace the original, insufficiently discriminate question with three well-defined and, as I will go on to show, more tractable questions:

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<sup>1</sup>I here focus on the question of the normativity of logic *for reasoning*. This is in line with much of the literature. However, some authors take the primary target activity of logic’s normativity not to be ‘internal’ reasoning processes, but rather the ‘public’ manifestations thereof in the form of assertion or particular forms of dialogue or debate. See e.g. (Dogramaci 2015), (Dutilh Novaes 2015), (MacKenzie 1989) and, to some extent, (Milne 2009). The point merits further elaboration, but I am inclined to think that much of the following discussion equally applies to their views.

<sup>2</sup>Harman’s criticisms are central to Harman’s work in epistemology. They go back at least as far as his (Harman 1973) (see also (Harman 1984, 1986, 2002; Harman and Kulkarni 2007; Harman 2009, 2010) among others). More recently, similar ideas have been defended in (Goldman 1986).

<sup>3</sup>Field (2009a, 2015), MacFarlane (2004), Milne (2009), Streumer (2007). Strictly speaking one can find two separate strands of argument in Harman’s work. The first is the aforementioned skepticism with respect to the idea that there is an interesting and systematic normative link between logic and reasoning. The second is that even if there is some such connection, there is nothing distinctive about the normative impact of logic on reasoning, that would set it apart from other sciences (See e.g., (Harman 1986, Ch. 2) and (Harman 2009)). Like the aforementioned authors, my concern is the first of these issues.

- Is logic normative in the sense of providing directives?
- Is logic normative in the sense of providing evaluations?
- Is logic normative in the sense of providing appraisals?

The benefits of so clarifying the issue are considerable. For one, I show how a failure to appreciate the proposed three-way distinction has impeded progress because it has led central contributors to the debate to talk past one another. What is more, this clarificatory work prepares the ground for positive accounts. The desiderata commonly appealed to in evaluating existing accounts are inconsistent, no one account can satisfy them all. Authors were thus led to discount certain desiderata to arrive a consistent subset. However, they did so in unprincipled ways. Distinguishing the three normative roles resolves the problem. We see that the inconsistency of our desiderata is itself a consequence of conflating distinct normative roles. With the distinction in place, we realize that each normative role is naturally associated with a consistent subsets of desiderata. Hence, while there is no one account that answers to all desiderata, each of the role-specific subsets of desiderata may. In this way, my proposed tripartite distinction gives rise to three well-defined questions, each with its own set of equally well-defined desiderata for assessing candidate responses. This, I submit, is further progress.

I proceed as follows. §2 summarizes Harman’s challenge to NT. In §3, I identify four key objections against NT. The objections, it turns out, do double duty, later serving as desiderata against which the viability of positive accounts of NT may be tested. §4 introduces the notion of a *bridge principle*. Bridge principles are general principles that articulate the ways in which a valid argument (or our attitudes towards such an argument) normatively constrains doxastic attitudes towards the relevant propositions. I expound and further develop John MacFarlane’s (2004) helpful taxonomy of bridge principles. §5 then introduces the three aforementioned normative roles in general terms, while §6 explains how they can be brought to bear on the present question. In §7, I explore the consequences of the proposed analysis. I show that key contributions to the debate—contributions by Harman, MacFarlane and Hartry Field—in fact fail to engage with one another as a result of their insufficient appreciation of the distinction. Finally, I explain how the three-way distinction impacts the way we interpret and evaluate bridge principles and how this constitutes significant progress in our grappling with the question of the normativity of logic.

## 2 Harman's skeptical challenge

At the core of Harman's skeptical challenge to NT, is the observation that a system of deductive logic and a 'theory of reasoning' are two fundamentally different types of theories with fundamentally different subject matters. A system of logic is concerned with certain properties of and relations between truth-bearers (and sets thereof). A theory of reasoning is a theory of how ordinary agents should go about managing their beliefs; an account of how they should go about forming and revising their beliefs (and other mental states). According to Harman, the reason so many of us had espoused NT is because we made the mistake of conflating these two fundamentally different enterprises. Once disabused of this confusion, Harman maintains, it is not clear that a systematic and interesting normative relation between logic and reasoning can be staked out.

Whatever the connection between logic and norms of reasoning might amount to, it is reasonable to assume that the central notion of logic—the notion of logical consequence—will be at the heart of it. After all, if I believe truly, the truth of my beliefs carries over to their logical consequences. Conversely, if my beliefs logically entail a falsehood, they cannot all be true. Whence our initial NT-favoring intuitions. But how to formulate a general principle that adequately captures these intuitions? Here is a first, albeit hopelessly flatfooted attempt:

- Logical implication principle (IMP): If  $S$ 's beliefs logically entail  $A$ , then  $S$  ought to believe that  $A$ .

Here  $S$  is an agent and  $A$  a proposition. IMP simply says that one's beliefs ought to be closed under logical consequence. Under certain assumptions IMP implies another *prima facie* plausible principle:

- Logical consistency principle (CON):  $S$  ought to avoid having logically inconsistent beliefs.

IMP and CON are distinct. IMP, in and of itself, does not prohibit inconsistent or even contradictory beliefs. All it requires is that my beliefs be closed under logical consequence. CON, on the other hand, does not require that I believe the consequences of the propositions I believe, it merely demands that the set of propositions I believe be consistent. However, against the background of classical logic, IMP entails CON provided we assume (i) that one ought not both

believe and disbelieve one and the same proposition; *and* (ii) that disbelieving a proposition is tantamount to believing its negation.<sup>4</sup> With these assumptions in place, the entailment is trivial. For let  $S$  be an agent with an inconsistent belief set  $\{A_1, \dots, A_n\}$ . By classical logic,  $A_1, \dots, A_{n-1} \models \neg A_n$ . Since  $S$ 's beliefs are closed under logical consequence,  $S$  believes  $\neg A_n$  and hence, by our assumption, disbelieves  $A_n$ . So,  $S$  both believes and disbelieves  $A_n$ .

My focus here is on how logical consequence constrains doxastic attitudes. Before I proceed I should therefore briefly comment on the notion of consequence I am operating with. I assume throughout that the consequence relation in question is that of first-order predicate logic with identity. Nothing much hangs on this assumptions. Plug in your preferred consequence relation, if you like. However, I take the notion of logical consequence to be independently settled. I am not claiming that a characterization of the normative role of logic might in some sense define the very notion of consequence.<sup>5</sup> Moreover, I set aside the question of logical pluralism, which merits separate treatment. My assumption here is that there is but one logical consequence relation that carries normative force.

### 3 The objections

IMP, I suggested, is unsatisfactory. This is evident from its vulnerability to the following four objections (most of which can be extracted from Harman's writings). It is worth spelling out the objections in some detail as they will later serve us as criteria of adequacy for future attempts at improving upon IMP.

(1) Facts about validity do not imply (at least not in any straightforward way) corresponding rules of rational conduct in reasoning. Suppose I believe both  $p$  and  $p \supset q$  (as well as Modus Ponens). The mere fact that I have these beliefs and that I recognize them to jointly entail  $q$  does not normatively compel any particular attitude towards  $q$  on my part. In particular, it is

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<sup>4</sup>Both assumptions can be challenged. On a more coarse-grained conception of propositions we face Fregean puzzles. For instance, the propositions expressed by 'Superman can fly' and 'Clark Kent can fly' might be taken to be one and the same. Yet, Lois Lane does not appear to be irrational if she believes the content of the former sentence, but disbelieves the content of the latter. The second assumption is rejected by advocates of paraconsistent logics. See e.g. (Priest 2006, Ch. 6) for discussion.

<sup>5</sup>Field (2009a, 2015), though he takes the notion of validity to be primitive, identifies the 'conceptual role' of validity with its normative role.

not generally the case that I ought to believe  $q$ . After all,  $q$  may be at odds with my evidence, and so it would be unreasonable of me to follow Modus Ponens slavishly by, as it were, ‘adding  $q$  to my belief box’. The rational course of ‘action’, rather, when  $q$  is untenable, is for me to relinquish my belief in at least one of my antecedent beliefs  $p$  and  $p \supset q$  on account of their unpalatable implications. Let us therefore call this the *Objection from Belief Revision*.

(2) IMP places excessive demands on agents whose resources of time, computational power, stamina, etc., are limited. For instance, according to IMP anyone who believes the axioms of Peano arithmetic ought to believe every last one of its theorems, even if its shortest proof has more steps than there are protons in the visible universe. But if the logical *ought* implies *can* (in the sense of what agents even remotely like us *can* do), IMP is incorrect. Call this the *Objection From Excessive Demands*.

(3) A related worry is this. Any of the propositions I believe entails an infinite number of propositions that are of no significance to me whatsoever. Not only do I not care about, say, the disjunction ‘I am wearing blue socks or Elvis Presley was an alien’ entailed by my true belief that I am wearing blue socks, it would be positively irrational for me to squander my meagre cognitive resources on inferring trivial implications of my beliefs that are of no value to my goals. Following Harman’s apt label, let us call the corresponding objection the *Objection From Clutter Avoidance*.

(4) There are various types of epistemic situations in which it is arguably not merely excusable for the agent not to align her beliefs with IMP on account of her ‘finitary predicament’ (Cherniak 1986), but where having incoherent beliefs may be permissible or even rationally mandated. The Preface Paradox arguably dramatizes such a situation. In Preface situations the agent, in disbelieving a straightforward logical consequence of her beliefs, nevertheless appears to be within her rational rights.<sup>6</sup>

On the basis of these considerations, some have been led to the conclusion that nothing interesting and systematic can be said about the normative relation between principles of deductive logic and reasoning. However, this, as we will see, is too quick.

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<sup>6</sup>See (Makinson 1965).

## 4 Bridge principles

The objections convincingly demonstrate that IMP, in its current formulation, is inadequate. The question that arises, therefore, is whether a viable replacement for IMP can be found: one that does reveal a normative link between logic and reasoning, while being invulnerable to the objections of the previous section. To speak with MacFarlane (2004), we are asking whether a tenable *bridge principle* is to be had. ‘Bridge principle’ here designates a general principle that articulates a substantive relation between, on the one hand, ‘facts about logical consequence’ (or, as we will see, our attitudes towards such facts) and, on the other hand, norms governing the agent’s doxastic attitudes vis-à-vis the propositions standing in these logical relations.

Now, in order properly to assess the pessimistic claim that no viable bridge principle is to be had, we need to know what ‘the options’ are. That is, to make good on the non-existence claim we need a way of overseeing the range of possible candidate bridge principles so as to be able to ascertain whether *all* such principles do indeed fail. But how? Thankfully, a good deal of the work of mapping out the logical space of bridge principles has been undertaken by MacFarlane (2004), who provides a useful classification of bridge principles. I devote the remainder of this section to describing and further developing MacFarlane’s taxonomy. It will procure us the tools necessary to evaluate Harman’s skeptical claim in a systematic fashion.

Let us begin with a general blue print for constructing bridge principles:<sup>7</sup>

- (★) If  $A_1, \dots, A_n \models C$ , then  $N(\alpha(A_1), \dots, \alpha(A_n), \beta(C))$ .

A bridge principle thus takes the form of a material conditional. The conditional’s antecedent states ‘facts’ about logical consequence (or attitudes toward such ‘facts’). Its consequent contains a normative claim concerning the agent’s doxastic attitudes towards the relevant propositions. Doxastic attitudes, as I use the term, include belief, disbelief, and degree of belief.<sup>8</sup> Here  $\alpha$  may (but need not) represent the same attitude as  $\beta$ . In fact, as we will see, it may also represent the negation of an attitude: e.g. ‘do not disbelieve the conclusion, if you believe the premises’.

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<sup>7</sup>We will soon also encounter what I call *attitudinal* bridge principles. They take the slightly different form:

- (★ $\gamma$ ) If  $\gamma(A_1, \dots, A_n \models C)$ , then  $N(\alpha(A_1), \dots, \alpha(A_n), \beta(C))$ .

Here  $\gamma$  designates a particular attitude of the agent towards the instance of  $\models$ . I return to attitudinal principles below.

<sup>8</sup>I will set suspension of belief aside for present purposes.

MacFarlane now introduces three parameters. Each parameter can be thought of as admitting of multiple discrete settings. The range of possible combinations among these parameter settings generates the logical space of bridge principles. The possible parameter settings are as follows:

1. Bridge principles may differ in the deontic operator they deploy: Does the normative constraint take the form of an ought (o), a permission (p) or merely of having (defeasible) reasons (r)?
2. What is the normative claim's *polarity*? Is it a *positive* obligation/permission/reason to *believe* a certain proposition given one's belief in a number of premises (+)? Or rather is it a *negative* obligation/permission/reason *not to disbelieve* (-)?
3. Different bridge principles result from giving the deontic operator different scope. Let  $O$  stand generically for one of the above deontic operators. Given that the consequent of a bridge principle will typically itself take the form of a conditional, the operator can take
  - narrow scope with respect to the consequent (C) ( $P \supset O(Q)$ );
  - wide scope (W)  $O(P \supset Q)$ ;
  - or it can govern both the antecedent and the consequent of the conditional (B) ( $O(P) \supset O(Q)$ ).

These parameter settings can be combined so as to generate a total of eighteen bridge principles. The symbols in parentheses associated with each parameter setting, combine to determine a unique label for each of the principles: The first letter indicates the scope of the deontic operator (C, W or B), the second letter indicates the type of deontic operator (o(bligation), p(ermissions), r(easons)), and '+' and '-' indicate the polarity.<sup>9</sup> For example, the label 'Co+' corresponds to our original principle IMP: 'If  $A_1, A_2, \dots, A_n \models C$ , then if you believe  $A_1, A_2, \dots, A_n$ , you *ought* to believe  $C$ '. 'Wp+' designates: 'If  $A_1, A_2, \dots, A_n \models C$ , then it is permitted that (if you believe  $A_1, A_2, \dots, A_n$ , you believe  $C$ )', and so on.

Many will take the bridge principles we have presented thus far to be problematic inasmuch as they are all vulnerable to Harman's Objection from Excessive Demands. They relate 'facts'

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<sup>9</sup>See (MacFarlane 2004, p. 7) for an exhaustive list of all bridge principles that can be generated in this way.

of logical entailment to certain normative claims regarding the agent’s relevant beliefs without taking into account the agent’s recognitional capacities. Clearly, though, ordinary agents are not apprised of all entailment facts and so cannot be expected to comply with the norms they are subject to.<sup>10</sup> Consequently, there may seem to be a good *prima facie* case for considering bridge principles whose antecedents are restricted to logical implications the agent actually recognizes or believes to obtain. For instance, Co+ might be reformulated as:

- (Co+r) If  $S$  recognizes that  $A_1, \dots, A_n \models C$ , then if  $S$  believes the  $A_i$ ,  $S$  ought to believe  $C$ .

Let us call this an *attitudinally constrained* variant of Co+. We might consider different types of attitudes. Recognizing, I take it, is a factive attitude. Certain internalists about epistemic justification and rationality will be dissatisfied with this. They might maintain that epistemic rationality or justification supervenes on the agent’s *non-factive* attitudes (e.g. (Broome 2012, p. 288) and (Wedgwood 2002)). Internalists of that stripe might opt for principles that are relativized to the agent’s beliefs or other non-factive states about what follows from what. I will return to this question in §5.

A number of further comments are in order. For one, MacFarlane’s bridge principles are not fully explicit. To illustrate, consider again Co+r. The principle may in fact be read in two ways. It may be read *diachronically*—as a principle about how an agent should modify her doxastic attitudes over time; or it may be read *synchronically*—as a principle as to which types of patterns of doxastic attitudes the agent should or should not manifest at a given moment in time. More precisely, the diachronic version of Co+r might be formulated thus:

- (Co+r-Dia) If  $S$  recognizes at  $t$  that  $A_1, \dots, A_n \models C$ , then if  $S$  believes the  $A_i$  at  $t$ ,  $S$  ought to believe  $C$  at  $t'$  (where  $t$  precedes  $t'$ ).

By contrast, the synchronic variant, when fully spelled out, comes to this:

- (Co+r-Sync) If  $S$  recognizes at  $t$  or before that  $A_1, \dots, A_n \models C$ , then if  $S$  believes the  $A_i$  at  $t$ ,  $S$  ought to believe  $C$  at  $t$ .

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<sup>10</sup>This is not the only way in which the taxonomy presented so far might be thought to be incomplete. Field (2009a, 2015) proposes quantitative bridge principles constraining degrees of belief. Steinberger (2016) considers bridge principles featuring an undecomposable dyadic conditional deontic operator.

In other words, the former principle states that agents ought, going forward, to come to believe the recognized logical consequences of their beliefs. The latter principle demands that one's beliefs be, at all times, closed under recognized logical consequence.

Different principles lend themselves more or less well to these two readings. The *C*s and *B*s can be interpreted as either synchronic or diachronic principles inasmuch as they make specific claims as to what an agent ought, may or has reason to believe or disbelieve given her other beliefs. The *W*s, by contrast, are most plausibly read as synchronic principles. Such principles do not, in and of themselves, recommend specific inferences but rather rule out certain patterns of doxastic attitudes. We will return to the synchronic/diachronic distinction in §7.

Having thus outlined the classificatory scheme, let us briefly comment on the deontic modals occurring in our bridge principles.<sup>11</sup> I will treat all deontic modals as propositional operators. This is not uncontroversial. Peter Geach (1982) and more recently Mark Schroeder (2011) have argued that so-called deliberative or practical senses of 'ought' are best analyzed not as operators acting on propositions but rather as expressing relations between agents and actions.<sup>12</sup> Nevertheless I will assume that the operator-reading can be made to work (for defenses of this position see e.g. (Broome 2000, 2013), (Chrisman 2015) and (Wedgwood 2006)).

So much for our survey of bridge principles. The framework provides a wide array of candidate principles. But how are we to assess our candidates? MacFarlane proposes we score each principle based on its performance as judged against a set of adequacy criteria. The winner (or set of winning principles), if any, takes the prize. What are the criteria? It is here that the objections we encountered in §3 make their second appearance: a desideratum is that our bridge principles be immune to these objections. In addition, MacFarlane advances the following two desiderata:

- **The Strictness Test:** At least when it comes to ordinary, readily recognizable logical implications leading to conclusions that the agent has reason to consider (i.e. that do not constitute clutter), the logical obligation should be *strict*. That is to say, *prima facie* there is something amiss about an agent who firmly endorses the premises but disbelieves the conclusion on account of countervailing reasons (MacFarlane 2004, p. 12). (MacFarlane takes inspiration from (Broome 2000, p. 85).) Note that the Strictness Test tells against

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<sup>11</sup>I skirt over several other details concerning the taxonomy that are inessential for present purposes. For a more complete exposition see (MacFarlane 2004) and (Steinberger 2017).

<sup>12</sup>MacFarlane (2014, Ch. 11) has followed suit.

defeasible principles featuring the *reason* operator such as, e.g.:

If  $A_1, \dots, A_n \models C$ , then  $S$  believes all of the  $A_i$  only if  $S$  has reasons to believe  $C$ .

- **The Priority Question:** The attitudinal variants have a distinctive advantage when it comes to dealing with Excessive Demands worries. But relativizing one's logical obligations to one's attitudes invites problems of its own, according to MacFarlane. The problem, he claims, is that 'we seek logical knowledge so that we will know how we ought to revise our beliefs; not just how we will be obligated to revise them once we acquire this logical knowledge, but how we are obligated to revise them even now, in our current state of ignorance' (MacFarlane 2004, p. 12).<sup>13</sup>

These, then, are the criteria. On their basis, MacFarlane adopts a combination of the principles  $Wr+$  and  $Wo-$ . My aim here, though, is not to take issue with MacFarlane's specific conclusions. My aim is more general. I believe the very question concerning the normativity of logic stands in need of clarification. In particular, I believe that there are three normative functions logic might be thought to play and whose routine conflation frustrates our quest for a defensible bridge principle. It is to this three-fold distinction that I now turn.

## 5 Directives, evaluations and appraisals

Norms, quite generally, can perform different roles or functions. I here want to elaborate the tripartite distinction between these functions as I introduced them at the outset of this paper. However, to make things concrete, let us consider the example of the following no-frills act-utilitarian principle:<sup>14</sup>

- (AU) If  $\Phi$ ing is the action (among the actions available to  $S$ ) that maximizes net happiness, then  $S$  ought to  $\Phi$ .

Consider now the following natural worries. The first worry is that the principle is *unhelpful*. It is unhelpful because it fails to *guide* the agent in most situations. After all, I am usually in no

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<sup>13</sup>MacFarlane (2004, p. 12) introduces a further criterion he dubs *Logical Obtuseness*, which tells against bridge principles of negative polarity. For my purposes it is of negligible importance, which is why I put it to one side here.

<sup>14</sup>(Goldman 1980) and (Srinivasan 2015) use a similar principle to illustrate related issues.

epistemic position to determine which of the actions available to me most effectively promote net happiness. (AU) provides me with no recipe that would aid me in my deliberation over what to do.<sup>15</sup>

The second worry is that the principle is *unfair*. It is unfair because it would be inappropriate to blame me if, out of sheer bad luck and despite my best efforts to comply with the principle, I flout it.<sup>16</sup>

A response to both of these worries is to recognize that (AU) plays a normative role other than the ones the objections turn on. Its role is that of a *criterion of correctness*. As such its role is not that of a decision procedure, nor that of a standard of blameworthiness. Its function, rather, might be thought of as that of specifying the conditions under which an act is right or wrong. Viewed in this way, the criticisms appear misguided because stemming from a misunderstanding of (AU)'s proper normative role. That is not say, of course, that the normative functions underwriting these criticisms—that of providing action-guiding instruction or that of supporting attributions of praise and blame—are themselves illegitimate. They are not, and should be accounted for in a complete moral theory. My point here is simply that confusion ensues if these normative roles are not clearly distinguished.

Let's remind ourselves of terminology. I call norms such as (AU) *evaluations*. I call norms that serve the purpose of guiding the agent *directives*.<sup>17</sup> And I call norms that lay the basis of our attributions of praise and blame *appraisals*. To gain a fuller understanding of these three normative roles and of their interaction, it is useful to highlight some of their characteristic features. To this end, consider the following norm schema:<sup>18</sup>

If  $C$ , then  $S$  ought to/may/has reason to  $\Phi$ .<sup>19</sup>

Here  $\Phi$  is a basic action.<sup>20</sup>  $C$  the norms' triggering condition. (AU) is an example of a norm

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<sup>15</sup>See (Srinivasan 2015, p. 292, fn. 25) for an extensive list of references to authors who have argued in favor of such first-personal norms in different domains of normative philosophy.

<sup>16</sup>I assume, for the sake of the example, that (AU) is correct. Notice that (AU) may also be unfair in the opposite sense, as it were: it may classify acts as correct even though the agent acted negligibly, and therefore reprehensibly, simply got lucky. Here and in the following, I am setting aside cases in which an agent is thought to be 'off the hook' on account of being in coerced, under duress or incapacitated, e.g. by being bonked over the head, mental illness, etc. The example should make it clear enough what kind of blamelessness resulting from non-culpable ignorance I am after.

<sup>17</sup>Notice that my use differs from Thomson's use of 'directives' and 'evaluatives' (Thomson 2008, p. 4).

<sup>18</sup>Cf. Srinivasan (2015).

<sup>19</sup>Many norms will take the form of biconditionals. For present purposes, we may focus on norms in conditional form.

<sup>20</sup>'Basic action' is to be understood broadly enough to include doxastic states.

that comes with a triggering condition the obtaining of which is not usually within our ken. The same goes, for example, for the truth norm for belief. More generally, it is distinctive of evaluative norms that their triggering conditions tend not to be *transparent* to the agent; the agent will not always be in a position to recognize whether *C* obtains. On account of this potential complete divorce between the conditions under which the norm applies and the agent's recognitional abilities, evaluations are not be generally 'followable'.

Not so in the case of directives or appraisals. For a norm to be serviceable (structurally) as a directive, it should be followable. It cannot fulfil its guiding role unless its triggering condition is (largely) transparent to the agent. Appraisals differ from directives in that they are external assessments of the agent. Yet they too must be sensitive to the appraisee's doxastic situation. Generally, an agent who, out of non-culpable ignorance, violates a norm, is not liable to criticism. Hence, norms performing this function should also be equipped with triggering conditions the obtaining of which is recognizable by the appraisee (or at least such that the appraisee can reasonably be expected to recognize them).

It is for this reason that (AU) would indeed be unhelpful if construed as directive, and unfair if construed as an appraisal. Let me briefly recapitulate, foregrounding the distinctive feature of each of the three normative roles.

1. *Directives* are first-personal and guide a subject in what to do, choose or believe.
2. *Evaluations* are third-personal and set standards or ideals against which to assess acts or states as good or bad, correct or incorrect, etc.
3. *Appraisals* are third-personal and lay the basis of our attributions of praise or blame to agents.

Before putting these distinctions to good use, a few more comments regarding the three roles are in order. When it comes to directives, some authors argue that *absolute* followability is impossible. Srinivasan (2015), drawing on Williamson (2000) as well as on empirical findings, mounts a strong argument against what she calls 'Cartesianism': the position that some triggering conditions are unfailingly transparent. According to this view, even if we 'internalize' the norm's triggering condition by linking it to the agent's internal states<sup>21</sup>, cannot secure transparency, since

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<sup>21</sup>See the references in (Srinivasan 2015, fn. 24).

mental states themselves are not transparent. I, for one, am skeptical about their conclusions. But there is no need to take sides on the question of Cartesianism's viability here. Transparency is not presupposed in the notion of a directive. Williamson and other externalists make ample use of directives. Simply, they reject the aforementioned inseparability of violation of directives and blameworthiness.

While the distinction between directives and evaluations has been recognized in a number of different normative fields,<sup>22</sup> appraisals may be less familiar. Let us therefore briefly flesh the notion out a bit more. Appraisals are central to our normative practices. As normatively regulating and regulated beings, we constantly hold each other accountable for what we do, intend or believe. This is true in the theoretical as much as in the practical arena. In particular, we appraise our epistemic peers in order to assess their character as inquirers. A conscientious reasoner is generally a trustworthy source of testimony. In arriving at such assessments, we frequently care about more than merely an evaluation of their beliefs as correct or mistaken. After all, knowing that my peer arrived at a mistaken belief not out of irresponsible doxastic conduct, but out of sheer bad luck and despite having discharged her epistemic obligations, is valuable information in forming an opinion about her epistemic character.

Within this practice, our standard for attributing blame may vary. At times they will be minimally demanding. That is, we appraise solely on the basis of what the appraisee in fact *takes* to be the case. According to this standard, the appraisee is not to be faulted, so long as she conducts herself in such a way that, were her beliefs pertaining to the situation true, she would be evaluated positively. However, other situations may call for more stringent standards; doing what *by her lights* she ought to do may not be sufficient to ensure blamelessness. In such cases our attributions of blame track not the agent's actual (relevant) beliefs, but the beliefs an agent can reasonably be expected to have. It may be, for instance, that our agent sincerely believed her act to be happiness-maximizing, and yet she may be culpable because her beliefs are unreasonable.<sup>23</sup>

How demanding may such a standard be? The standards by reference to which we attribute blame would seem to vary widely with context. I, as a layman, could not be faulted for failing

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<sup>22</sup>See Bermudez (2009), Goldman (1980), Jackson (1991), and Pryor (2001) to name but a few.

<sup>23</sup>See (Rosen 2003, p. 63) for fuller discussion.

to see mathematical relationships that a working mathematician may rightly be expected to recognize effortlessly. I may, however, be held responsible for failing to appreciate elementary arithmetical truths, which I did not appreciate at the time I acted, but whose truth I could have come to see had I paid the matter more thought. In these, as in other cases, the context will presumably dictate the appropriate standard.

So much for the individual features of our normative roles. What can be said about their interrelations? There is much to be explored here. Different accounts in different normative domains are bound to conceive of these relations differently. My aim here is not to chart all possible or actual positions, nor to defend any particular one such position. Instead, I offer a few examples to give the reader a sense of how such a story might go. Let us begin with another example. Suppose my friend's car broke down. I help her out by lending her my bicycle to get to work. She cycles off gratefully, but soon thereafter is killed in a tragic accident. A utilitarian—of the sort we are interested here, at any rate—treats (AU) as an evaluative standard. In their (AU)-based judgment, my act of bike lending had disastrous consequences was plainly wrong.<sup>24</sup> My honorable intentions and the fact that the consequences of my act were not foreseeable, are irrelevant. The latter circumstances *do* factor into their normative assessment of me, the agent, however. The evaluative status of the *act* is thus sharply distinguished from the assessment of the *agent*. While my act is negatively evaluated, I am not to be faulted for it. Evaluation and appraisal thus come apart. How, now, do directives enter into the picture? Directives, it might be thought, are designed to guide us so as to maximize our chances of meeting or at least approximating the evaluative standard. Directives, in turn, have often been seen to be closely linked to appraisals. Some have maintained, for instance, that compliance with the right kind of directive secures blamelessness.<sup>25</sup> But directives and appraisals need not necessarily march in lockstep. One example of such a view is given by the externalist anti-Cartesianism discussed above. Anti-Cartesianists maintain that absolute followability in directives is an illusion and that, therefore, directives may be non-culpably violated.

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<sup>24</sup>The utilitarian in question would be an adherent to 'actual consequentialism' in Sinnott-Armstrong's terminology (Sinnott-Armstrong 2015).

<sup>25</sup>See (Ross 1939). For an application to internalism about epistemic justification, see (Steup 1999). For lucid critical discussion, see (Srinivasan 2015).

## 6 Bridge principles and the three normative roles

Our task now is to show how our tripartite distinction can be brought to bear on bridge principles. First note that bridge principles neatly fit our norm schema: they comprise a triggering condition (given by the antecedent) as well as a properly normative part, which kicks in when the triggering condition is met. As in the case of other types of norms, a bridge principle's triggering condition will typically predispose it to playing one or another normative role. How so? Take an unrestricted principle of the form 'if  $A_1, \dots, A_n \models C$ , then  $\Phi$ '. Ordinary agents are no more capable, in general, of determining whether a complex logical entailment obtains, than they are of determining which of a number of acts maximizes happiness. Some may object that the two cases are importantly different: the first is an instance of *factual* ignorance, they will say, whereas the second is one of *logical* ignorance. Standard models of rationality (epistemic logic, Bayesian approaches, AGM belief revision theory, ranking theory) allow for factual ignorance, but presuppose a priori omniscience. While an a priori omniscient agent may be oblivious to any number of empirical facts, her powers of processing the information available to her is unhindered by cognitive limitations of computational power, time, concentration, and so on. I have no objection to such idealizations; they give rise to valuable formal tools. However, my aim here is to provide a more general account of logic's normative force, one that also tells us how it affects the less fortunate, imperfectly rational among us. All the same, my picture leaves room for idealized agents, which register as a special case. With this clarification in place, let us now take a closer look at what types of bridge principles lend themselves to playing which normative roles.

Begin with directives. As we have seen, ordinary agents are not apprised of all the entailment facts adverted to in the principle's antecedent and so are in no position always to follow the principle. A more suitable bridge principle must therefore instruct agents like me how, given my limited state of information about the logical facts, I ought/may/have reason to manage my beliefs. I will make no attempt here to determine the exact form a guiding bridge principle should take. The following remarks aim to give the reader a sense of the challenge.

A natural first move might be to subjectivize the triggering conditions, restricting the principle to *believed* entailments—i.e. from principles of the form 'if  $A_1, \dots, A_n \models C$ , then  $\Phi$ ' to 'if

$S$  believes  $A_1, \dots, A_n \models C$ , then  $\Phi$ '. However, this move is beset by a number of difficulties. First, it might be thought that the principle mistakenly invites to the agent to look 'inward' toward her own mental states. Since the aim is to align one's beliefs appropriately with the logical facts, it is to these the agent should be 'looking'. There is a sense in which this is true, of course. But it stems from a confusion over distinct perspectives. The principle seeks to articulate, from a third-person point of view, how the agent ought to conduct herself in light of what she believes to be the case. From the agent's own perspective the directive takes on a different form since the question 'What do I believe with respect to the logical facts?' gives way to the question 'Which logical facts obtain?' That said, the notion that the agent should be concerned with what is the case, while being limited to her current state of information may be better captured by the following:

- If in  $S$ 's best estimation  $A_1, \dots, A_n \models C$ , then  $N(\alpha(A_1), \dots, \alpha(A_n), \beta(C))$ .

What is more, this formulation avoids the implausible intellectualism the belief-based principle seems committed to.  $p$ 's being the case in  $S$ 's best estimation does not presuppose  $S$ 's explicit belief in  $p$ . In particular, it need not presuppose the believer's having the ingredient concepts. Moreover, the schema should not be understood in such a way as to presuppose that  $S$  must deliberately apply the norm. Normative guidance plausibly most often occurs beneath the surface of conscious experience. Hence, directives can guide our action without needing to be explicitly believed or deliberately applied in the course of conscious deliberation. The schema is intended to avoid such overly intellectualistic understandings of normative guidance.<sup>26</sup>

Turn now to evaluations. Evaluations, we said, merely classify, in objective terms, whether or not an act or state does or does not fall short of the normative ideal. Therefore, an evaluative bridge principle will typically be characterized by the fact that its antecedent is wholly unrestricted. It simply states which patterns of doxastic states the agent ought/may/has reason to have or to avoid, in light of the logical relations between the states' contents. It will thus simply take the form:

- If  $A_1, \dots, A_n \models C$ , then  $N(\alpha(A_1), \dots, \alpha(A_n), \beta(C))$ .

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<sup>26</sup>See (Railton 2006) for an insightful discussion of normative guidance that emphasizes the fact that our norm-governed selves are usually sensitive to norms that we would often be incapable of articulating explicitly even if we paused to think about them.

Finally, what do appraisals come to in the context of bridge principles? An appraising bridge principle is one that grounds one’s assessment of how well an agent responds to the normative demands of logic. Generally, an agent cannot be faulted for responding to logical entailments beyond her cognitive reach. Consequently, we said, appraising bridge principles will be relativized to the appraisee’s situation.<sup>27</sup> As we also noted, however, our criticisms need not be based on which entailment facts the agent *actually* takes to be the case. They may be based in which entailment facts she can reasonably be *expected* to take to obtain. Appraisals may thus come in varying degrees of idealization, depending on how much logical acumen is deemed exigible from our agent. At one extreme—degree zero of idealization, if you like—an appraising principle is relativized simply to the agent’s actual logical beliefs:

- If  $S$  believes that  $A_1, \dots, A_n \models C$ , then  $N(\alpha(A_1), \dots, \alpha(A_n), \beta(C))$

In this case, the agent’s logical obligations extend no further than her logical beliefs. At the other extreme—the maximal degree of idealization—the agent is expected to recognize every logical entailment. At degree zero, appraising principles mimic, from a third-personal point of view, the corresponding directives; at the maximal level of idealization, appraising principles converge with the corresponding evaluative principles (one is, at it were, appraising a potentially logically perfect agent). Typically, appraising principles operate at intermediary degrees of idealization. For instance, even when we are assessing an agent by her own ‘logical lights’, we may abstract away from whimsical logical beliefs that the agent would readily revise were she to give the matter more thought or with the right amount of prompting. Legal contexts are a further example of when we might be interested in what logical consequences an agent may reasonably be expected to take into account, even though the agent may have neglected to do so. The logic class is another such example: we may assess a beginning logic student on how well they make do with the still modest logical resources available to them: ‘Here you failed to derive this formula even though you already have the tools to do so’; ‘You couldn’t have been expected to solve the last exercise, which draws on concepts that you are not yet familiar with’, etc. How much idealization is permissible, then? For instance, might we even correct for systematic errors in logical reasoning like those frequently documented in the findings of cognitive psychologists? Again, there are

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<sup>27</sup>If that again smacks of too much intellectualism, our principles can be relativized to the agent’s capacity to determine what follows from what.

presumably no firm rules here. Everything depends on what degree of idealization is appropriate for the context in question, and on the way in which appraisals are thought to interact with the other normative roles.

## 7 Applications

It is time to reap the fruits of our labor. The most obvious upshot is that we are now indeed in a position to replace our nebulous initial question concerning the status of NT, by the three more precise questions mentioned in the introduction. Our ability to do so has the following two important consequences. First, it allows us to see how a failure to distinguish between these questions has caused leading participants to talk past one another, which has impeded progress in the debate. Second, in a more positive vein, our distinction reconfigures the process by which we assess bridge principles, thereby paving the way for a resolution of the problem. We are now in a position to see how. For expository convenience, I begin by sketching the ramifications of the distinction in general terms, before turning to the two major upshots individually.

Let us remind ourselves of the dialectical structure of the debate. Harman's skeptical challenge, we said, amounts to the question if a philosophically viable bridge principle is to be had. In light of our distinction, we are now faced with three versions of Harman's challenge—one for each of the normative roles. In each case we must ask ourselves whether a given bridge principle adequately performs the normative function in question. And to ascertain whether it does, we engage in the sort of score-keeping exercise described in §4: we assess the candidate principle against our criteria thereby determining which principle (or group of principles) fares best (if any).

Now, the crucial insight underlying both of the consequences mentioned in the previous paragraph is this: we must assess bridge principles differently depending on the normative function we take them to be performing. That is to say, a set of criteria are appropriate for assessing bridge principles playing one kind of normative role, while they might be unsuitable for assessing another. Different normative roles call for different sets of adequacy criteria. And so a desideratum may be given more or less weight (including zero) *as a function of the normative question being asked*. Therefore, any assessment of a bridge principles makes sense only against the back-

ground of the type of normative role—directive, evaluation or appraisal—the bridge principle is supposed to play.

Some examples may be helpful here: the Objection from Excessive Demands appears to rule out certain bridge principles on account of the exorbitant demands on our ability to recognize logical implications it places upon us. The restrictions the criterion imposes on principles that satisfy it are appropriate when it comes to bridge principles assessed *qua* directive or *qua* appraisal because both types of normative roles are sensitive to the agent's (limited) recognitional abilities. By contrast, the Excessive Demands-criterion gets no purchase on principles assessed *qua* evaluations, which do not take the agent's viewpoint into consideration and therefore should not be so restricted. Excessive demands should thus be given due weight in the former cases, but should be discarded in the latter case.

The Priority Question, on the other hand, has bite when it comes to evaluations—an evaluation is generally concerned with the standards to which we hold ourselves, not with what the agent takes those standards to be. But for that very reason it is not applicable to directives, since in following directives we can only go on the logical entailments, we, in our best estimation, take to obtain.

In summary: different normative functions invite different criteria of adequacy. Hence, bridge principles will be responsible to a greater or lesser degree to different criteria depending on the kind of normative role we are assessing them for.<sup>28</sup> All of these considerations should be factored into our assessment of bridge principles. We can systematically tabulate the functional relation between the normative roles we are assessing a principle for and the weight to be accorded to our desiderata:

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<sup>28</sup>Oftentimes, as in our examples, once the normative role is specified, it may be an all-or-nothing matter whether a given desideratum is in force. But it need not be. For instance, when it comes to appraisals, the Objection from Excessive Demands may be given more or less weight depending on the degree of idealization of the appraisal.

	Directives	Evaluations	Appraisals
Objection from Belief Revision	✓	✓	✓
Clutter Avoidance	✓		✓*
Excessive Demands	✓		✓*
Preface Paradox	✓	✓	✓
Strictness Test	✓!	✓	✓
Priority Question		✓	✓*

In the table the occurrence/absence of a checkmark indicates that the desideratum in question is relevant/irrelevant to assessing bridge principles playing the normative role in question. For instance, a check in the cell at the intersection of the ‘Objection from Belief Revision’ row and the ‘Directives’ column means that the Belief Revision criterion is a desideratum we need to take into account when assessing bridge principles *qua* directives. Checkmarks followed by asterisks indicate that the weight to be given to the desideratum in question depends on the degree of idealization involved in the appraisal. For example, Excessive Demands considerations carry considerable weight when it comes to appraisals that introduce only minimal degrees of idealization, but carry less weight as the degree of idealization increases. The case of the Strictness Test is more delicate and deserves more attention than I am able to give it here. It should therefore be taken with a grain of salt as indicated by the exclamation mark.

Here is how the table comes to be. Belief Revision is presumably applicable to bridge principles regardless of the normative role they are thought to perform. The objection is most naturally read as targeting diachronic principles, but it can be directed also at synchronic ones: it is not the case that my current beliefs at any given time automatically ought to be closed under logical consequence (in particular if my current beliefs are inconsistent). The most promising response, it would seem, is to opt for a wide-scope principle. That is, a principle that rules out certain combinations of attitudes (e.g. believing the premises and not believing the conclusion), in contrast to narrow scope principles that prescribe belief (or disbelief) in particular propositions on the basis of what one already believes at the time.

Clutter avoidance is an appropriate criterion when it comes to normative roles in which the agent’s cognitive limitations are taken into account as in the case with directives and, to

a degree, with appraisals. However, since evaluations tend to be ideals of logical coherence, they may abstract away from considerations of Clutter Avoidance. The same, we said, holds for Excessive Demands.

The Preface Paradox afflicts all three normative roles equally. As does, perhaps, the Strictness Test. Notice that the Preface Paradox and the Strictness Test are the only pair of desiderata still in tension even after we relativize our assessment of bridge principles to normative roles. The Preface Paradox arguably shows that our logical obligations cannot be strict: at the very least in Preface cases it seems appropriate to believe each of a (large) number of propositions and simultaneously to disbelieve jointly entailed conclusions thereof, e.g. their conjunction. Several strategies might be considered to relieve this tension. One avenue is to try to talk oneself out of one's 'Preface intuitions', or out of one's Strictness intuitions. A further option is to adopt a bridge principle that articulates logical constraints on degrees of belief (cf. Field (2009a, 2015)). Much like probabilistic approaches to the Preface, such accounts elegantly parry the paradox. Here is not the place to explore these options and their fit with our normative roles. My point is that there are ways of resolving the tension between the Preface Paradox and the Strictness desiderata.

Finally, as we noted, the Priority Question does not apply to directives, while it does apply to evaluations and to appraisals (depending on the degree of idealization).<sup>29</sup>

Now that we have a better appreciation of the ramifications of our distinction, let us see how it sheds light on the current debate. I focus on three central actors: Harman, MacFarlane and Field. To begin, let us take a second look at Harman's challenge to NT. Which of the three normative questions does he target? The question Harman asks (and to which he offers a skeptical response), as we have seen, is whether a systematic and interesting normative connection can be said to obtain between principles of deductive logic and a 'theory of reasoning'. As we have noted in §2, a theory of reasoning, for Harman, is a first-person normative account that advises the

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<sup>29</sup>One may ask whether evaluative standards could themselves be relative to agents' attitudes. That is, for instance, could a principle of the form 'If  $S$  knows  $A_1, \dots, A_n \models C$ , then  $\Phi$ ' express an evaluative standard? It could, I suppose. Allowing for this would mean that the Priority Question would need to be discounted after all in the case of such relativized evaluations. But that is not quite right. The point of the Priority Question constraint is not to rule out attitudinal principles *per se*, but rather to ensure that no principles can serve as an evaluation that replaces the evaluative standard—relativized or not—by attitudinal triggers weaker than that of the standard itself. For instance, taking known entailment to be an evaluative standard, this generalized Priority Question is still in force. It requires that no bridge principle appealing to attitudes weaker than knowledge can serve as an evaluation.

reasoner how to go about managing—forming, revising, reinstating—her beliefs. His conception of the shape a theory of reasoning should take is central to Harman’s general outlook on the nature and aims of epistemology. We might characterise it as a form of ‘first person’ (Stevenson 1999), ‘regulative’ (Goldman 1980) or ‘procedural’ (Pollock and Cruz 1999) epistemology. That is to say, according to Harman, epistemology’s aim is to provide a first-personal account of proper doxastic conduct. Whereas third-personal accounts might propose ‘external’ conditions under which an agent’s belief is justified, qualifies as knowledge, etc., first-personal accounts seek to articulate principles and maxims that guide the agent in regulating her doxastic conduct.<sup>30</sup> Harman’s approach to NT is of a kind. The question of the normativity of logic, for Harman, is the question as to whether logic can be seen to provide normative guidance to the epistemic agent.<sup>31</sup> His concern, therefore—and the target of his skepticism—is *the question whether a viable bridge principle fit to play the role of a directive is to be had.*

Let us turn now to the two defenses of NT mounted by MacFarlane (2004) and Field (2009a, 2015). Spoiler alert: MacFarlane’s and Field’s proposals—for all their considerable merit—do not ultimately provide solutions to the question *as Harman poses it.* Their alternative interpretations of NT lead them to wrestle with what are in effect distinct problems. But let us consider each in turn.

In MacFarlane’s case it is not entirely clear which of the three types of normative roles is at issue. He appears to waver between the two non-guiding types of normative assessments. His insistence on the question of the agent’s responsibility—as manifested by the weight he gives to the Excessive Demands and the Clutter Avoidance considerations (idem, p. 13)—suggests that he conceives of bridge principles as performing an appraising role. The fact that he assumes there to be a close connection between bridge principles, their violation and the agent’s liability to criticism points in the same direction. In contrast, the importance he accords to the Priority Question—that we are normatively bound by logic even when we are wholly unaware of the logical connections between our belief contents shows that the type of normative assessment he has in mind is largely independent of the agent’s perspective. This appears to suggest that he is thinking of bridge principles as fulfilling an evaluative or at least an idealized appraising

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<sup>30</sup>See (Harman 2010) for a helpful summary of his conception of epistemology.

<sup>31</sup>This is also evidenced by the fact that the potential candidate bridge principles he considers would have all the hall marks of a directive (Harman 2009, p. 333).

function. Regardless of where MacFarlane himself ultimately comes down, it is clear is that bridge principles for MacFarlane are not to play the role of directives as they indisputably do for Harman.

Field, on the other hand, is clear that his proposed bridge principle fulfils an evaluative role. At least, he is explicit about this in the latest version of his account. He therein notes ‘that we recognize multiple constraints on belief, which operate on different levels and may be impossible to simultaneously satisfy’ (p. 13). Among these he targets the ‘non-subjective sense of “should”’, which clearly corresponds to our evaluative role.<sup>32</sup>

This establishes my claim that Harman and his opponents are not addressing the same question; all three authors understand NT in subtly but importantly different ways. The distinction between directives, evaluations and appraisals allows us to diagnose how their views diverge. This does not, *per se*, tell against any of the three accounts, of course. What it does show is that MacFarlane’s and Field’s accounts, presented (in part) as responses to Harman’s challenge, are not in fact in direct competition with Harman’s position at all. It is conceivable, for example, that Harman is right to think that no bridge principle is capable of offering the right kind of normative guidance, while Field is right about logic’s evaluative role. We would then have to conclude that Harman’s skepticism is partially justified in the sense that there is no guiding bridge principle that fits the bill and hence that logical consequence does not directly enter into first-person doxastic deliberation in ways we might have expected. Yet, it would still be true that logic *does* have a broadly normative role to play—to wit, an *evaluative* one.

Let us now turn to the second benefit of my account. I have claimed that it not only dispels the confusion bedevelling the debate surrounding NT, it also gives us reason to be optimistic that our suitably reformulated questions concerning the status of NT admit of answers. Here, finally, is how. As a further result of our illicitly running together directives, evaluations and appraisals, we were led to develop an incoherent conception of what an adequate answer to our question would look like: the set of criteria against which our bridge principles were to be evaluated formed

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<sup>32</sup>It is noteworthy, however, that in earlier incarnations of his account (Field 2009a,b), Field seems to have taken a different view. Indeed in his (Field 2009a, p. 252), he explicitly takes himself to be ‘concerned with Harman’s obstacles to’ the connection between logic and rationality. He is, in this earlier work, clearly troubled by the Excessive Demands and Clutter Avoidance Objections and flirts with various attitudinal principles to cope with them, which suggests that, at this stage, he took his bridge principles to have a guiding role. In his response to Field, Harman (2009) makes it clear that he does not believe that probabilistic bridge principles favored by Field are unsuitable for the purposes providing guidance.

an inconsistent bunch. We simply lumped together the criteria, which, as we now recognize, are associated with distinct normative roles. It is no surprise, then, that no one principle could possibly satisfy all our desiderata simultaneously. Consequently, to advance a positive account, authors were led to downplay some of the criteria. For only a consistent subset of the criteria could vindicate their favored principle. The problem is that they lacked any convincing grounds for discounting the desiderata in question; their choice therefore seemed unmotivated.

The tripartite distinction not only gives us an explanation as to why we ended up in this muddle, it also shows us a way out. For it provides us with precisely the principled grounds we previously lacked. Each normative role—directive, evaluation and appraisal—comes with its proprietary set of adequacy criteria. And while the union of these sets of criteria is inconsistent, the individual sets associated with each normative role are not. This is reflected in our table above. What this shows is that it is (at least) possible that each of our three normative questions admits of a solution. Thanks to our distinction we are thus in a position to meaningfully ask and to systematically examine whether each of the resulting questions does or does not admit of an answer. It is in this sense that our distinction clears the way for the resolution of the problem of the normative status of logic.

## 8 Conclusion

Let us take stock. My point of departure was NT: the thesis that logic is normative for reasoning. I reviewed Harman's influential skeptical challenge to NT thereby laying down criteria that a successful defense of NT would have to meet. I also presented and developed MacFarlane's classification of bridge principles and explained how his project can be thought of as a systematic attempt at a response to Harman's objections. However, I then went on to argue that before we can hope to make any progress on the question of the normativity of logic, we will need to disentangle it. I undertake this clarificatory task by showing that there are in fact three distinct broadly normative roles logic might be thought to occupy and hence three senses in which logic might be taken to be normative: It might be thought of as a purveyor of directives, of evaluations or of appraisals. Having characterized the three normative roles, I explained the benefits of introducing the distinction. I began by showing that the distinction forces us to assess bridge

principles relative to the normative role they are taken to perform. I then demonstrated how the failure to appreciate the distinction between the three normative functions on the part of the main actors in the contemporary debate leads them to talk past one another. Finally, I explained how this renders our three questions concerning the normativity of logic more tractable. In short, I hope to have shown in this essay, why the contemporary debate failed to make significant progress and also to have offered a road map for tackling the question of logic's normative status going forward.

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