Endorsement and Assertion

Will Fleisher

(Penultimate draft. Forthcoming in *Noûs*
doi: 10.1111/nous.12315)

Abstract

Scientists, philosophers, and other researchers commonly assert their theories. This is surprising, as there are good reasons for skepticism about theories in cutting-edge research. I propose a new account of assertion in research contexts that vindicates these assertions. This account appeals to a distinct propositional attitude called endorsement, which is the rational attitude of committed advocacy researchers have to their theories. The account also appeals to a theory of conversational pragmatics known as the Question Under Discussion model, or QUD. Hence, I call the theory the EQUD model. Motivating this account is a recognition that the speech act of assertion has two roles to play in research contexts. The first is the advocacy role, in which researchers assert a theory in order to advocate for it. The second is the evidential role, which is used to add to the common stock of information available to a field of inquiry. The EQUD model provides an account of warranted assertion for both these roles in research contexts. This success provides support for the theory of endorsement. It also provides support for information updating accounts of assertion.

Introduction

Cutting-edge inquiry is difficult. In research fields lacking consensus, there are many reasons for skepticism about theories advocated by researchers. These include pervasive disagreement, pessimistic induction, and underdetermination of theory by evidence. Thus, it seems that researchers are often in no position to rationally believe their theories. Despite this, researchers are committed advocates of their views, even going so far as to assert them. Such committed advocacy usually involves belief. Moreover, warranted assertion generally requires the speaker to meet a high epistemic standard. Yet researchers' assertions in support of their theories often seem warranted. This presents a puzzle: excellent researchers, acting as they ought, appear to violate the standards of both epistemic rationality and warranted assertion.

Consider an example drawn from a recent scientific debate about canine domestication (Frantz et al. 2016; Larson et al. 2012; Yong 2016). Greger Larson, evolutionary biologist at Oxford, is a committed advocate of the view that

dogs were domesticated twice. Summarizing their findings, he and coauthors write, "Genomics and archaeology reveal both a dual origin of domestic dogs, and a subsequent translocation of East Asian dogs into Europe" (Frantz et al. 2016). Larson continues to defend this theory in subsequent publications, and in interviews with journalists (e.g., Daley 2017). Nonetheless, when Larson was asked to describe his confidence in the theory, he responded, "If I was being bold, I'd say it's a 7 out of 10. We lack the smoking gun" (Yong 2016).

This is a clear example of a researcher who is a committed advocate for a view, who remains so over time, and is willing to assert the theory. This is despite significant disagreement with other researchers. Moreover, when prompted about the strength of his confidence, Larson gives a quite low estimate, and admits it is inadequate to support full belief. Larson is a leading researcher at Oxford, respected by his peers, and engaged in fruitful and effective cutting-edge research. A theory of epistemic rationality which counted him irrational in his behavior and unwarranted in his assertions would thus seem inadequate. We need an account that vindicates this kind of productive commitment and advocacy.

In order to solve this puzzle, I will propose a new account of assertion in research contexts that vindicates researchers who appropriately serve as committed advocates of their theories. This account appeals to a distinct doxastic attitude, which I call *endorsement* (Fleisher 2018). The account also appeals to a theory of conversational pragmatics known as the *question under discussion model*, or QUD (Roberts 2004, 2012). I will call the combined account the *EQUD model*.

To motivate this account, I will argue that the speech act of assertion plays two roles in research contexts. The first is the *advocacy role*, which causes the puzzle. The second role I will call the *evidential role*, which is the familiar role of adding to the common stock of information. Advocacy role assertions are valuable because they promote beneficial disagreement: productive, reasoned debate and discourse about the theory in question. Evidential role assertions, on the other hand, are relied upon to increase the common stock of evidence.

As a result, I see three desiderata for any account of the speech act of assertion and its governing norms in research contexts. First, the account must rationally vindicate researchers' assertions made in the advocacy role, despite their relatively low epistemic standing. Second, it must require assertions playing the evidential role to meet a high epistemic standard. Third, the account must explain the fact that assertions made in research contexts generate genuine, productive disagreement.

Simple constitutive norm accounts of assertion, such as the Knowledge Norm Account (Williamson 1996, 2000), have difficulty meeting the first desideratum. The second and third desiderata cause trouble for context-sensitive constitutive norm accounts, such as those defended by Goldberg (2015), McKinnon (2015), and Gerken (2015).

The EQUD model, however, meets all three desiderata. This success has two significant upshots. First, it provides support for the theory of endorsement. Second, it provides evidence concerning the nature of assertion more

generally. In particular, its success serves as disconfirming evidence for simple constitutive norm accounts like the Knowledge Norm of Assertion. It instead supports accounts of assertion that characterize it by its essential effect of updating conversations. It confirms information update accounts such as those proposed by Stalnaker (1984) and Roberts (2012).

Below, I will first outline the skeptical worries facing researchers, and then argue that researchers nonetheless make warranted "renegade" assertions of their views. In section 3, I will argue that contextually sensitive constitutive norm accounts cannot meet the second and third desiderata as they are currently formulated. Finally, I will propose the EQUD model, and argue it is the best account of assertion in research contexts.

1 Skeptical Worries

Skeptical challenges for both philosophy and science are well-known. Much has been written about the special problems faced by philosophy, and concerning the realism/anti-realism debate in the philosophy of science. Most of these will likely be familiar. However, it is worth mentioning some challenges that make belief irrational, and knowledge unrealistic, in contexts of inquiry.

One such problem is pervasive disagreement. Recently, Bryan Frances (2010; 2013) and Sanford Goldberg (2013; 2015) have argued that philosophical disagreement is particularly inimical to knowledge and justified belief. Goldberg's argument focuses on "systematic" disagreement: philosophical disagreement is not localized to an individual proposition, is widespread in the field, and is entrenched (Goldberg 2015, 229). Frances, on the other hand, focuses on the specific problem of disagreement with acknowledged epistemic superiors, faced by most philosophers. David Lewis is revered as one of the greatest thinkers of his generation; yet most philosophers disagree with one or more of his views. How can one believe a theory when everyone disagrees, even our epistemic superiors? These two problems, of systematic disagreement and disagreement with experts, provide significant reason for doubt concerning philosophical theories.

Philosophy is not the only field to face such a skeptical challenge. There seems to be pervasive disagreement at the cutting edge of just about any field. It's hard to imagine what a cutting-edge field would look like without such disagreement. Consider the debates among physicists about the proper interpretation of quantum mechanics, or among evolutionary biologists about whether natural selection is gradual or episodic.

A second major skeptical challenge is the "pessimistic induction" (Psillos 1999). In the past, scientists had explanatory, predictive, mature theories which nonetheless proved false. Consider, for instance, Ptolemaic astronomy, Newtonian mechanics, and the phlogiston theory of combustion. Each of these provided explanations, helped make largely accurate predictions, and were well-confirmed by experiment. But they all turned out false. Given how often this has happened in the past, we can infer that our current theories will also

be overturned. Thus, we should not believe our theories. Of course, this is a famous problem for scientific knowledge and belief. However, the problem seems at least as pressing for philosophers and humanists (Hájek 2007).

A third reason to doubt theories in cutting-edge inquiry is underdetermination of theory by evidence (Longino 1990; Psillos 1999; Stanford 2017). Available evidence is often inadequate to definitively confirm one theory over its alternatives. This problem is especially difficult in cutting-edge fields, where it is commonly accepted that we need to generate more evidence before definitively accepting any theory.

These challenges make it extremely implausible that belief is the appropriate attitude for our favored theories in difficult contexts of inquiry. Given these skeptical worries, cutting-edge research domains appear to be what DeRose calls a "knowledge desert"(2016), and what Goldberg calls a field with "diminished epistemic hopes" (2015). Each skeptical problem provides a a reason to doubt the theories that we advocate. Taken together, these reasons seem decisive. Philosophers are increasingly coming to recognize this.[1]

2 Renegade Assertions

In spite of the skeptical challenges, researchers often assert their theories. Goldberg has argued that philosophers make assertions when arguing for their theories, and suggests that we even assert the conclusions of these arguments (Goldberg 2015, 246-47).

An assertion is a speech act that involves making a claim about the way the world is. I will be considering to two kinds of theories about the nature of assertion.[2] The first kind explains assertion by appeal to its essential effect: updating the conversational context of the speaker and audience. I will focus on a version of this theory which understands this as updating the information in the "common ground." This common ground represents the information mutually accepted by the participants in the conversation. This is the kind of account I will ultimately endorse.[3]

The second kind of theory appeals to constitutive norms. A popular recent version is the Knowledge Norm Account (KNA) (DeRose 2002; Williamson 1996, 2000). According to KNA, assertion is individuated as the one speech act governed by the knowledge norm. This norm is a rule that constitutes the act type, much like the rules of chess constitute the game. This rule is: Assert that p only if you know that p. According to KNA, every token speech act appropriately governed by this constitutive rule is an assertion. Every assertion is appropriately evaluable by this standard, even those not intended to follow the rule, e.g., lies.

KNA is a powerful, simple account that meets a number of important desiderata for a theory of assertion. KNA explains the effectiveness of assertion in communicating knowledge. It also explains why assertions can be challenged, and how they can be evaluated as normatively appropriate (i.e., warranted). KNA explains the apparent sincerity requirement on assertion: it seems that

generally one must believe what one asserts, and of course knowledge is thought to entail belief.[4]

Despite its virtues, KNA also has several difficulties. One problem concerns whether knowledge is the appropriate standard for the norm. Numerous arguments have been proposed in support of other epistemic standards.[5] Another problem is that KNA does not say much about what the act of assertion is, or what it does. Even if KNA successfully individuates assertion, this does not fully explain its nature or function. Some authors have thus adopted the norm as a regulative norm, rather than a constitutive one: on this view, *warranted* assertion is explained by the knowledge norm, but the nature of assertion is explained differently. Others have kept KNA as a part of the account of assertion, but have conjoined it with other, seemingly more explanatory theories.[6]

A particularly relevant difficulty for KNA is that different contexts appear to have distinct standards for warranted assertion. Courtroom testimony seems to have very high epistemic standards, whereas casually chatting about a visit to the park does not. In the former case, if I assert that Larry was at the park, I need to see him there myself, and very clearly. In the latter, I could assert the same sentence based on a glimpse, assuming it really was Larry. DeRose has argued that these cases give us reason to prefer a contextualist account of knowledge, and that this evidence bolsters KNA and contextualism (2002; 2016). However, even this kind of contextualist sensitivity cannot account for some apparently warranted assertions in research contexts (as DeRose himself notes). Larson's assertion of the two-domestication theory, described above, is an example. Such assertions are also extremely common in philosophy. Many examples are detailed by Goldberg (2015) and Frances (2010, 2013). Frances calls philosophers who remain committed to their views in light of systematic peer and expert disagreement "epistemic renegades." Following this, I will refer to assertions made in research contexts about topics marked by the skeptical worries as "renegade assertions."[7]

KNA does not explain the apparent warrant of renegade assertions, even if knowledge is contextually sensitive (or even contrastivist, as in Schaffer 2008). These speech acts look and sound like assertions. They seem not only warranted, but essential to our research practices. Yet, those who make them are in no position to know them, due the the skeptical worries rehearsed above. One way try to rescue KNA is to suggest that domains of inquiry are special, and that a different set of norms hold there, even though KNA holds for normal contexts. One could also argue for a constitutive norm account of assertion that is even more contextually variable than KNA-cum-contextualism. Goldberg (2015) and McKinnon (2015) appeal to a strategies of this kind.[8]

According to Goldberg's *Mutually Manifest Epistemic Norm Account* (MMENA), the norm of assertion in a context is determined by the mutual beliefs interlocutors have about the epistemic standards of the conversation.[9] Similarly to EQUD, MMENA appeals to an attitude distinct from belief to provide the appropriate epistemic standards for assertions in research contexts. Goldberg calls this attitude *regarding-as-defensible* (Goldberg 2015, 279). I think this is the same attitude as endorsement, though I disagree with Gold-

berg about its characterization and governing norms.

MMENA explains warranted renegade assertions by appeal to contextual sensitivity: The standards for warranted assertion can shift based on (what the participants take to be) the conversation's purpose. In research contexts, where one is unlikely to gain knowledge based on what is said, the standards are lowered. This makes it warranted to assert things one does not believe. Renegade assertions, like Larson et al.'s (2012) assertion that dogs were domesticated twice, are warranted because they meet the lowered standards in the conversation.

3 Two Roles for Assertion

Unfortunately, context-sensitive constitutive norm accounts like MMENA face a difficult problem. These views, as they stand, fail to adequately distinguish two kinds of assertions researchers make within the very same contexts, and thereby license clearly unwarranted assertions.

Researchers employ assertions for two different purposes. Sometimes, researchers engage in committed advocacy for a favored theory. This is necessary for rigorous debate, an essential component of healthy inquiry. Other times, researchers need to reliably transmit information, e.g., when reporting experimental results. Researchers must have a strong epistemic position regarding experiments, though not necessarily to the analysis of the results. Similarly, a high standard is required for assertions about a research field's literature or history (Goldman (2001) calls these answers to secondary questions). I cannot assert that Lucille is committed to intentionalism about phenomenal character unless I have good reason to believe this.

Consider the following case:

> Gerry is an evolutionary biologist, working on canine domestication. This field contains a contentious, unsettled debate over whether dogs were domesticated once or twice. In part, this is because there is debate about whether available evidence, like DNA result X, are conclusive evidence for the two-domestication-events theory. Gerry endorse this theory. In conversation, she makes the following argument:
>
> (1) If fossil DNA testing returns result x, then dogs were domesticated twice.
>
> (2) I engaged in fossil DNA testing, and it returned x.
>
> (3) Therefore, dogs were domesticated twice.

Gerry's assertion of (1) and (3) seem warranted. These two assertions are meant to be entered into the discourse of the field as part of a debate. We can suppose that there is disagreement about the evidential import of fossil DNA testing, and its reliability compared to other methods. Gerry has a commitment in this debate, despite lacking the kind of epistemic standing that would

be required for knowledge or justified belief. Assertion of the first premise is meant to enter into this debate, one which is likely to have good long-term epistemic consequences.

In order for assertions of this kind to contribute to healthy inquiry, they must promote the right kind of disagreement. It is intuitive that debate and disagreement are beneficial for inquiry, but there is also significant empirical evidence. Psychology research has shown that groups that disagree and engage in debate are better at following logical rules and answering questions accurately.[10] Case studies in the history of science also provide support for the benefits of disagreement. Relevant examples include the development of plate tectonics (Solomon 1994) and hominin paleoanthropology (De Cruz & De Smedt 2013). Solomon argues that this kind of disagreement, which she calls "dissensus," has historically been more valuable for inquiry than consensus.

Thus, it is important that the first premise and conclusion of Gerry's argument are not immediately accepted by her interlocutors. To play the proper role in debate, these assertions must be challenged. It is important for a debate that it involve disagreement, as this will spur the appropriate critique of argument, the gathering of new evidence, and the marshaling of new arguments (in the form of objections and replies). Assertions facilitate such debate, as they are liable to this sort of challenge.

Renegade assertions, such as (1) and (3), contribute to healthy inquiry by promoting rigorous debate. Such assertions are warranted, despite the many reasons to doubt they are true. Thus, they must be warranted by a lower epistemic standing than is required for justified belief. This is the motivation behind accounts of assertion during inquiry that involve lowering epistemic standards in a context.

Gerry's assertion of (2), however, is importantly different in purpose. Gerry is not proffering something for debate, to provoke beneficial disagreement. Instead, she is reporting the results of an experiment. This assertion aims to transmit information to her interlocutors, to expand the common stock of evidence in the field. It might fail: perhaps Gerry's associates know of a flaw in the experimental design. However, Gerry can generally expect to be trusted when making such an assertion. Assertions like (2) aim to guarantee the claim in question as evidence. For this guarantee to be appropriate, some higher epistemic standard is required. If researchers adopted a policy of asserting such claims based on lowered epistemic standards, the common ground of conversations during inquiry would contain inadequately supported "evidence." Such conversations could then no longer serve to expand the stock of common evidence.

There are thus two assertoric roles employed by researchers: the role of contributing to productive disagreement and debate, and the role of adding evidence to the common ground. Call these the *advocacy role* and the *evidence role*, respectively.[11]

As they stand, context-sensitive views like Goldberg's (2015) do not distinguish between these two roles. These accounts suggest a blanket change to the

epistemic requirements for warranted assertion in a specific research context. According to MMENA, this one standard is set by the mutual beliefs of conversational participants concerning the aim of the conversation as a whole.[12] The standards shift between conversations, but no mechanism is provided for distinguishing between different kinds of assertions within a context.

A view like this, where the standard of assertion is set for a whole conversation, explains how Gerry's assertions of (1) and (3) are warranted. But it would also warrant assertions like (2) based on the same lowered standard. This is clearly inappropriate. (2) is playing the evidential role of adding information to the common ground, adding to the stock of scientific evidence. It must meet at least as high a standard as assertions in more ordinary contexts. A low standard is inadequate.

Proponents of MMENA (or related views) might suggest they have the resources to respond to this objection. However, doing so would require adding features to the theory: in particular, features of the EQUD model I propose below. Thus, even proponents of context-sensitive constitutive norm views will hopefully find something helpful in my proposal. In the final section, I will return to this point, and offer my reasons for thinking that the EQUD account is preferable to a modified version of something like MMENA.

4 Endorsement and the QUD Model

I have argued there are two roles that assertions in research domains must play: the advocacy role and the evidential role. This suggests that to give a proper account of how assertion works in research, we need to pay attention to what assertion *does*: the nature of its general function in communication.[13] In this section, I argue that the right general account of what assertion does helps explain how it plays both of these roles in research contexts. Assertions play these two different roles within the same conversation, and this is so because they can be aimed at answering different kinds of questions. I will argue that advocacy role assertions are governed by a norm which appeals to the attitude of endorsement. Meanwhile, a distinct norm governs evidential role assertions. The resulting account combines the theory of endorsement with the QUD model of discourse. The combined EQUD account provides the best theory of assertion in research contexts.

4.1 Endorsement

Endorsement is a propositional attitude of resilient commitment and advocacy that researchers have to favored theories. While similar to belief, the two are distinguished by significant differences in their functional profiles and governing norms. My use of "endorsement" here is as a term of art. It does not rely on pre-theoretic intuitions about the English words "endorse' and "endorsement." Philosophers may sometimes use the term "endorse" to talk about what I have in mind, but this is not necessary for justifying the theory.

The following characterization of endorsement is not meant as a full analysis. Instead, it offers some characterizing statements that should be adequate to pick out the mental state at issue.[14]

> **Endorsement:** Endorsement is a propositional attitude. S endorses p in a research domain d only if:
>
> 1. S is disposed to assert that p, or otherwise express commitment to p (in d).
> 2. S takes herself to be obligated to defend p (in d).
> 3. S treats p as a premise in her further reasoning (in d).
> 4. S shapes her research program in d (in part) based on p.
> 5. S is resiliently committed to p (in d).
> 6. S takes p to be a live option, i.e., she does not know p is false.
> 7. In endorsing p, S aims to promote successful inquiry.

In order to unpack this characterization, I will first discuss the features that distinguish endorsement from belief, then those most directly connected to assertion.

Endorsement is distinguished from belief in part by these conditions, especially the last five. The second, third, and especially fourth features should be interpreted as requiring a greater degree of practical commitment than belief does. When a researcher endorses a theory, this has significant import for her behavior in a research domain.[15]

The resilience mentioned in condition 5 concerns contrary evidence, theoretical anomalies, and other difficulties for a theory or research program. Endorsement is typically maintained despite such difficulties. This is clearly different from belief: typically, when subjects encounter strong contrary evidence (or other difficulties) concerning a proposition they believe, they do (and should) give up their belief. Moreover, it is inappropriate to believe theories that are not favored by the preponderance of evidence. It would be irrational to believe a proposition if you think it is more likely to be false than true. Endorsement, however, can be (rationally) maintained even in such circumstances. This resilience is important for the role that endorsement plays in theory pursuit and advocacy.

Endorsement, as the seventh feature suggests, aims at promoting successful inquiry.[16] This aim, and the related need for resilience in commitment to a theory, suggest that endorsement must be sensitive to considerations that belief is not. Rational (or justified) belief is plausibly only sensitive to reasons concerning the truth of the proposition the belief is about (and perhaps only to evidence for that proposition). A subject's endorsement, however, must be sensitive to considerations about how it can contribute to successful inquiry.

Endorsement is thus governed by a distinct kind of epistemic normativity, called *inclusive epistemic rationality*, which includes both intrinsic and extrinsic epistemic reasons.[17] Intrinsic epistemic reasons are familiar, traditional epistemic reasons: reasons favoring the truth of the proposition in question. The canonical example of an intrinsic reason is evidence. Extrinsic epistemic

reasons, on the other hand, are reasons concerning what will promote successful inquiry. They are related to truth, but indirectly. They concern, for instance, social epistemic considerations such as the distribution of cognitive labor (Kitcher 1990; Strevens 2003), avoiding premature consensus (Zollman 2010), and whether being a "maverick" researcher would be useful in the circumstances (Muldoon 2013; Weisberg & Muldoon 2009). Extrinsic epistemic reasons also include considerations about the promise or pursuitworthiness of a theory, such as whether a theory is testable (Steel 2010), whether it is coherent and fruitful in its predictions (Šešelja & Straßer 2014), and whether it has an associated model or heuristic that provides avenues for improving the theory or overcoming anomalies (Whitt 1992).[18]

It's generally accepted that believing theories based on the reasons I call extrinsic is irrational. To see this, think of epistemic bribery cases: cases where a subject is offered many true beliefs if they form a false belief.[19] Intuitively, believing on the basis of bribery is irrational. Not so for endorsement. That endorsing a claim (even with little evidence for its truth) may lead to other true beliefs is an extrinsic epistemic reason. This can be an excellent reasons to pursue, defend, and advocate for a theory. Researchers should be sensitive to such reasons when determining what to endorse. Rational endorsement, then, requires sensitivity to reasons which are irrelevant to rational belief.

Rational endorsement depends on the weight of both intrinsic and extrinsic epistemic reasons. This helps explain endorsement's resiliency when facing contrary evidence: evidential weakness for a theory can be outweighed by strong extrinsic epistemic reasons in its favor. This means researchers can be rational in contributing to better distribution of labor, and in pursuing unlikely but live options. This feature of endorsement eases tension between collective and individual rationality.[20]

Endorsement's sensitivity to inclusive epistemic rationality also positions it to justify renegade assertions. Part of what warrants renegade assertions is that they promote successful inquiry. Responsiveness to extrinsic epistemic reasons explains this. Endorsement is responsive in this way. It is also associated with assertion, because of the first feature of its characterization above. It is an attitude of committed advocacy, and advocacy involves making assertions and defending the theory. This motivates the idea that endorsement is the attitude needed for sincere advocacy role assertions.

The first condition in the above characterization of endorsement builds in a relationship between endorsement and assertion. The account of assertion discussed in the remainder of section 4 helps explain and vindicate this connection. Assertion is an appropriate speech act for an endorsing subject to engage in because of its essential effect: to update the common ground of a conversation. As we will see, this feature of assertion helps to explain how the same speech act plays both the advocacy and evidential roles. Assertion's usefulness in playing the advocacy role explains why endorsing subjects should be disposed to assert. Asserting is one good way of advocating for a view, and endorsement is an attitude of committed advocacy. Moreover, this explains why the norms of rational endorsement serve as an appropriate regulative norm on

advocacy assertions.

On a related note, condition 2 requires that a subject who endorses a theory be willing to defend it. The theory of conversational pragmatics discussed below (in section 4.3) helps to show how asserting what one endorses also promotes this kind of defense. Together, these two conditions—the disposition to assert and the willingness to defend—ensure that endorsement represents a significant commitment to a theory. Such commitment is likely to increase the subject's psychological motivation for pursuing and defending the theory. A disposition to make assertions is key to satisfying both conditions.

4.2 The Question Under Discussion Model

Assertion is best characterized by its essential effect: updating the shared information of conversational participants. Theories embracing this idea model the shared information with a conversational "scoreboard," also known as a context, or common ground (Lewis 1979; Stalnaker 1984). I will appeal to a version called the *Question Under Discussion* (QUD) model, which was proposed by Roberts (2004, 2012). The QUD model has been widely successful in explaining phenomena such as prosody, presupposition projection, epistemic modals, and ambiguity and anaphora resolution.[21]

There are three main parts to the QUD model. The first is a context set, or common ground, which represents the shared information of the conversational participants. Following Stalnaker (1984), this is represented by the set of possible worlds that are compatible with what the participants mutually accept (or presuppose).

The second aspect of QUD is the set of questions under discussion, also called the *discourse goals*. Individual questions are represented as sets of propositions: those which are potential answers to the question. A complete answer is one of these propositions. The questions are ordered: some are *sub-questions* whose answers are pursued in order to answer more fundamental questions. To reflect this ordering, Roberts calls the set of QUDs in a conversation a "stack." Questions at the top of the stack are answered in order to answer the more fundamental questions below. When a new sub-question is raised, it gets added to the top of the stack, as part of a strategy for answering the questions already present. The most fundamental questions are at the bottom.[22]

The third aspect of the QUD model is the participants' *domain goals*. These are goals interlocutors pursue by conversing. If you and I are discussing when the next train is leaving, our domain goal might be *catching a train*. The domain goals help to determine what the interlocutors' discourse goals (i.e., their QUDs) are. In research contexts, domain goals involve discovering how the world is regarding the target of that field. Domain goals may be very different in different contexts. They may sometimes be shared intentions or shared plans. In other cases, they may be more like shared desires. Helpfully, research fields seem to provide constraints on what the domain goals of a conversation will be, as they conventionally have reasonably well-established goals.

According to QUD, an assertion is a proposed answer to a question under

discussion. When an assertion is accepted, the context set is updated by removing worlds incompatible with the answering proposition. That QUD is then closed, and participants move to the next sub-question of the overall QUD. Which assertions are appropriate, then, will depend on what questions are under discussion. The QUD model characterizes assertion in terms of what it (typically) does when accepted: it shrinks the context set by answering questions under discussion. There is no appeal to constitutive norms in defining what assertion is. However, a full account still requires a theory of when assertions are epistemically warranted. What norms, we might ask, govern when it is appropriate to make assertions of this kind? Such norms are *regulative*, rather than constitutive. They do not determine what the act is, but rather provide the standard for evaluation.[23]

The QUD model allows significant variation in standards governing assertion. Which norms are relevant depends on the domain goals of conversational participants. In particular, what attitudes and epistemic statuses the interlocutors expect to gain from the conversation help determine what norms govern their speech acts.[24] If interlocutors expect to know what they uptake from a conversation, then the epistemic standards a speaker must meet will often be high. This much is similar to what Goldberg and McKinnon suggest. However, these expectations can also vary between different assertions in the same context, depending on which QUD is being answered. As discussed below, this feature allows EQUD to explain both roles of assertion. If interlocutors have multiple goals in their domain, these goals can define distinct norms for answering different questions under discussion. Thus, distinct norms may apply to different assertions in the same context, depending on the QUD.

4.3 Endorsement and QUD Model in Research Contexts

Together, the QUD model and the theory of endorsement provide the best account of assertion in research contexts. This is largely because, as I will argue, the combined EQUD account meets our three main desiderata. First, it explains the warrant of advocacy role assertions. Second, it explains how there remain higher epistemic standard for evidential role assertions. Third, it explains how advocacy assertions involve genuine, productive disagreement despite all participants being epistemically faultless. In this section, I will detail the account and show how it meets these goals.

According to EQUD, researchers have an overall domain goal of promoting successful inquiry. This requires answering the questions which characterize the domain of inquiry. For instance, an evolutionary biologist seeks to answer questions such as "How were dogs domesticated?". A sub-question for this is "How many times were dogs domesticated independently?". In conversation with peers, answering these questions constitute the discourse goals: they are the questions under discussion. The context set is determined by the propositions mutually accepted by researchers, as determined by the background commitments and evidential standards of the field of inquiry.

The overall domain goal of promoting inquiry provides subsidiary goals:

sub-goals to be pursued as a means to the overall goal. The sub-questions in the discourse goals are one kind of subsidiary goal already acknowledged in QUD. I propose we recognize additional domain sub-goals. The EQUD model reflects this by including the subsidiary goals of adding evidence to the context set, and of promoting beneficial debate. Crucially, the presence of these sub-goals generates distinct epistemic norms for proposed answers to different kinds of QUDs.

The basic idea is that questions at the top of the QUD stack are questions about what evidence is available to researchers. QUDs at the bottom of the stack will be about which theories in the research domain are correct. The domain goals will normatively constrain attempts to answer these different kinds of questions. This basic idea is novel to EQUD, and is essential to its ability to address the three desiderata for an account of assertion in research contexts.

Assertions answering top-level questions require high epistemic standards, corresponding to the evidential standards of the relevant domain of inquiry. These assertions play the evidential role, and have a high-epistemic-standard regulative norm. This norm is a function of the domain goal to increase the available evidence for researchers. Researchers expect to update on, come to know, and deploy this information in subsequent research. Assertions answering top-level QUDs will thus be governed by a norm representing the standards for evidence possession in that domain.[25]

Proposed answers to more fundamental questions further down the stack are constrained by a different norm. This norm is derived from the goal of promoting beneficial debate. Such discourse requires that there be productive disagreement, as researchers advocate for their own theories and criticize opposed positions. The norm of assertions aimed at this beneficial disagreement is provided by rational endorsement: researchers should only (advocacy) assert what they rationally endorse. This is due to endorsement's role as the appropriate attitude of committed advocacy during inquiry.

According to EQUD, which questions count as top-level and which count as bottom-level is also represented in a conversation's domain goals. This representational choice models the mutual agreement of the interlocutors regarding their research domain and the context of their conversation. Whether a question is top-level or bottom-level will reflect the goals and evidential standards of the question's specific domain of inquiry.

EQUD can be illustrated by another appeal to dog research. Suppose Gerry and Susan are biologists engaged in this domain. They have a domain goal of figuring out how dogs were domesticated, and this provides the question for the very bottom of the stack: (Q_1) "How were the ancestors of contemporary dogs domesticated?" Very close to the bottom of the stack is question (Q_2) "How many times were the ancestors of contemporary dogs domesticated?" At the top of the stack are questions concerning the results of experiments the researchers are engaged in, e.g., (Q_3)"What are the results of DNA experiment X?" and (Q_4)"What are the results of archaeological dig Y?" Gerry and Susan's subsidiary domain goals are to increase the evidence available to researchers

in the domain, and to promote beneficial disagreement. Their context set is determined by those propositions already accepted as evidence in the domain.

Gerry runs experiment X, following all appropriate protocols for such experiments, and the results are x_1. She then asserts "The results of experiment X are x_1." This assertion is warranted because she is answering question Q_3, which is governed by the high-evidential norm determined by the domain goal of increasing the evidence, and her experimentation meets this standard. In other words, she makes a warranted evidential role assertion. Susan, a cooperative interlocutor who recognizes all this, accepts the assertion as answering Q_3 and allows it to update the context set of the conversation.

Then, Gerry makes another assertion, a proposed answer to Q_2: "Dogs were domesticated twice." This proposition is not one she knows. Instead, given that she recognizes the epistemic difficulties of cutting-edge inquiry, she merely rationally endorses it. Further, she expects that Susan will not accept the proposed answer, and instead will refuse to update the context. Nonetheless, according to EQUD, this second assertion is also warranted. This is because Gerry and Susan have the domain goal of promoting beneficial disagreement, and asserting answers to bottom-level QUDs promotes this goal. Such assertions do this by prompting the requisite beneficial disagreement. In this case, in order to stop the common ground from being updated, Susan must deny Gerry's assertion. Moreover, in this kind of context, such a denial will require Susan to provide justification with explicit reasons, which is part of what creates the benefit of disagreement.

This example illustrates that the EQUD model meets the first two desiderata I stated for a theory of assertions in research contexts. First, it licenses renegade assertions like Gerry's answer to Q_2. Second, it maintains that higher standards apply to evidential role assertions, like Gerry's assertion of the answer to Q_3. It coherently meets both desiderata because it assigns distinct norms in the same conversation, depending on the stack-level of the question being answered. Gerry's case also illustrates how advocacy assertions can lead to *productive* disagreement. I now turn to a discussion of this third goal.

According to EQUD, disagreements are productive because assertions are proposals to update the common ground, which represents what is jointly accepted by conversational participants. If a participant allows an update they disagree with, they are left with inconsistency in what they accept. Thus, there is normative pressure to avoid inconsistency by either refusing the update or changing their mind. Moreover, refusal to accept an update begets a further expectation: providing reasons for the refusal. Thus, advocacy role assertions predictably lead to reasoned debate and disagreement, which benefits inquiry. This is how EQUD meets the third desiderata of explaining how renegade assertions can prompt genuine, productive disagreement, despite the disagreement being reasonable and epistemically faultless.[26]

To illustrate, consider Gerry's case again. When Gerry asserts an answer to Q_2, she proposes an update to the context set. If her assertion goes unchallenged, this update will result. However, Susan does not agree with this answer to the question. She endorses the single domestication account, and so

is obligated to defend it (given the nature of endorsement as outlined above). Moreover, she has good reason to defend it, given the domain goal of promoting beneficial debate. Susan should thus refuse to allow Gerry's proposed update. She might do this by making a contrary assertion, or simply by saying something like "no, that's not right" or "I disagree." Given that the conversation is part of a rational inquiry, she will then be required to give reasons for her refusal. Her disagreement will obligate her to provide arguments against the two domestication account, or for the single domestication account. Thus, Gerry's advocacy assertion promotes beneficial debate because of what would happen if her interlocutors did not express disagreement.

One might worry about the sincerity of this disagreement. Researchers appear sincere in their disagreements, but usually sincerity requires that the subject believe what they are asserting. According to EQUD, however, expression of rational endorsement plays the same role in making advocacy role assertion sincere that beliefs play for assertions in other contexts. This is because endorsement is a subject's attitude of commitment and advocacy, one that has significant epistemic standards that must be met in order for it to be rational. It reflects the appropriate commitment of a researcher to her theory.[27]

Thus, the EQUD model meets each of the three desiderata for an account of assertion in research contexts. To my knowledge, it is the only account that explicitly addresses all three goals. In the next section, I will consider whether context-sensitive constitutive norm accounts can meet these goals.

EQUD is the result of combining the theory of endorsement and the QUD model. I think this combination provides the best account of assertion in research contexts. One could endorse either of these theories independently. However, endorsement on its own does not provide an adequate account of assertion. The QUD does not provide an adequate account of assertion in research contexts, as it lacks the resources on its own to describe the appropriate normative and sincerity conditions for advocacy role assertions. Meanwhile, the two theories are coherent and work well together to describe the nature of conversation during inquiry. Moreover, each theory is independently motivated, and their coherence and success when combined in this context provides additional confirmation for both theories. In the next section, I will discuss why I think this combined EQUD theory is preferable to an amended version of constitutive norm accounts. For all these reasons, I think EQUD is the best theory available.

5 EQUD or Revised MMENA?

In section 3, I suggested that context-sensitive constitutive norm accounts have difficulty explaining the high epistemic standards required for warranted evidential assertions during inquiry. This is because they allow for epistemic standards to shift between conversations, depending on their purpose, but describe no mechanism for shifts within a conversation.

A proponent might point out, however that MMENA is already committed

to the idea that epistemic standards are set by the mutual beliefs of conversational participants. Couldn't this be used to allow for even more context-shifting? On the resulting picture, the standards shift within a conversation based on the mutual beliefs of the participants at that point in the conversation. Specifically, mutual beliefs about the goal of an assertion fix the standards for that assertion. Then MMENA would allow for differences in warrant based on the different roles being played by particular assertions. Thus, the view would meet the first two desiderata of accounting for both roles of assertion.

I will make three points in response. First, I acknowledge that most of what the imagined proponent of MMENA suggests is correct. Notice, however, that this defense involves significant revision. This revision involves adding features to the theory: adding both a reliance on a specific set of beliefs pertaining to aims of researchers, and additional context-shifting. These necessary additions are features of EQUD. To see this, consider what additional beliefs researchers must have on this revised account. First, they must recognize two distinct kinds of domain goals pursued in a conversation: 1) adding information to the common stock of evidence, and 2) promoting productive debate. Second, they must recognize there are two roles of assertion corresponding to these. Third, they must have some way of distinguishing the two kinds: presumably, by appeal to each assertion's subject matter, i.e., to what questions they attempt to answer. Fourth, researchers must believe the epistemic standards applied to different assertions depend on which role they play. Finally, they need beliefs about what is required for both the warrant and sincerity of advocacy role assertions.[28] These features, which the revised MMENA would need to meet the first two desiderata, are the features I have argued for above. Thus, my theory provides a novel benefit even for defenders of context-sensitive constitutive norm accounts. They can adopt these features to make their own theories work better. Alternatively, they can adopt EQUD as part of their account, while remaining committed to the idea that there is a constitutive norm.

My second point in response, however, is that there remain reasons to prefer the full EQUD package to a modified version of MMENA. For one thing, once these necessary features have been added, the resulting view looks very similar to an updating account of assertion, rather than a constitutive norm account. The explanation of assertions in research contexts depends primarily on the background picture of conversational pragmatics. There is little work left to be done by the constitutive norm in explaining how advocacy role assertions work. That is to say, there is no need for an appeal to a *constitutive* norm once the background features of the EQUD model are available. Rather, the explanation is provided by the way assertions function—as means to pursue answers to questions—and the regulative norms which are derived from this function.

Third, and most importantly, the EQUD account is preferable because it meets the third desiderata. As outlined in section 4.3, EQUD provides an account of the productivity of disagreement resulting from advocacy role assertions. Moreover, this explanation is independently motivated: it involves fea-

tures of conversation we have independent reason to accept. Assertions are proposals to update the common ground. Conversational participants are expected to refuse updates they will not accept, and they are already expected to give reasons for such refusals. This much we already need to explain many conversational phenomena. EQUD appeals to this independently motivated theory of conversational pragmatics to explain the productivity of disagreement. It is part of a simple and coherent picture of how assertions function generally, with research contexts as a special case. Thus, EQUD has a significant advantage as an account of assertion in research contexts.

Moreover, it will not be easy to further revise MMENA to account for the third desiderata (of explaining productive disagreement). The view lacks resources to explain how advocacy role assertions promote productive disagreement. Crucially, MMENA explains all the normative responsibilities and entitlements generated by assertion in virtue of the constitutive norm. This is precisely the role the norm is meant to play. However, the norm's epistemic standards must be lowered for advocacy role assertions to count as warranted. But when the lowered standards have been met, the account has no way of explaining why an interlocutor might be required to dispute what has been asserted. The asserter has fulfilled their duties, and so there is no normative impetus left for the interlocutor to take issue with what has been asserted. All the normative impetus was supposed to be provided by the constitutive norm, but that norm has been satisfied. The constitutive norm does not help explain how productive disagreement occurs. So, MMENA's strategy for explaining the warrant of advocacy role assertions undercuts its ability to explain productive disagreement. This leaves proponents with a dilemma: either MMENA cannot account for the normative pressure which leads to productive disagreement (and thereby cannot explain productive disagreement); or it requires another source of normativity that does not rely on the constitutive norm, which undermines one of the main arguments for MMENA in the first place.

Of course, EQUD also counts speakers of advocacy role assertions as meeting all their normative requirements. But it is not committed to explaining all the normative aspects of assertion in virtue of a single constitutive norm. It has other resources to draw on from the general theory of conversational pragmatics of which it is a part.[29] Thus, I think the first objection is met. MMENA advocates can take on board much of my discussion, though I think there are still good reasons to prefer the EQUD.

6 Potential Objections to EQUD

Before concluding, I will consider a few other potential worries for EQUD.

A first concerns whether renegade assertions are truly assertions. According to constitutive norm views, any speech acts not governed by the norm simply fail to be assertions, by definition, regardless of apparent similarities. Thus, renegade assertions must be a distinct kind of speech act.[30] However, I think the EQUD account is preferable to treating these as different speech

acts. For one thing, it seems counter-intuitive that clearly similar speech acts are of a distinct species merely because of a different context. Moreover, many philosophers are explicitly claim they are asserting their philosophical theories.[31]

More importantly, there are theoretical reasons to prefer EQUD, which treats them as assertions. Once again, the most important is that EQUD offers an explanation of the third desideratum. An account of renegade claims as distinct speech acts must offer an alternative explanation of disagreement. Moreover, it must provide one that justified treating the speech act as distinct from assertion: it would either need a different account of how disagreement works in conversation (i.e., one that didn't appeal to updating), or it would need to explain how the speech act is distinct from assertion, despite behaving just like assertion in updating the context.

Even if one finds these responses uncompelling, EQUD could still provide a useful account of the distinct speech act. During inquiry, researchers engage in speech acts which advocate their favored views. If these are not best called 'assertions', this cause no problem for EQUD. Rational endorsement is the appropriate norm for speech acts playing the advocacy role, while more is required of speech acts which play the evidential role.[32]

A second, related worry concerns whether disagreement in research contexts is best understood as involving assertions of first-order claims. Perhaps the surface appearance of such disagreement is merely apparent. Instead, the disagreement actually concerns higher-order claims about, e.g., the evidential support evidence provides a hypothesis. If so, perhaps EQUD's explanation of disagreeing assertion is not adequate.

It is true that many disagreements concern higher-order propositions, and sometimes this is not explicit. Nonetheless, we still need an account like EQUD to understand even these disagreements. They can be understood as disagreements over updating the common ground of a conversation. Not all updates are proposed using assertions of the very proposition describing the update: they could instead be proposed by implicature. One primary benefit of updating views like QUD is their explanation of how conversational implicature works (Roberts 2012; Stalnaker 1984). EQUD inherits this feature, and so allows that updates can be proposed by implicature. This explains disagreement over claims which are not explicitly stated. Some of these will be higher-order claims of the sort in question. The picture of productive disagreement for such implicated claims will be the same as proposed above.

Meanwhile, EQUD can explain cases that by all appearances are disagreements over first-order claims. It does so in essentially the same way it explains the implicit/higher-order disagreements: as involving refusals to update. It requires no explaining away of the appearance that the disagreements are first-order. EQUD gives a unified picture of productive disagreement. It straightforwardly vindicates clearly first-order disagreements, while explaining implicit and/or higher-order disagreements using precisely the same machinery.

A third potential objection concerns researchers' reliability at recognizing the different kinds of assertions, and their reliability at recognizing when each

role should be employed. Perhaps, one might worry, there is reason to doubt that subjects are sensitive to these distinctions. For one thing, it seems like some assertions might take place in an inquiry where a particular theory has begun to gain consensus, and it is unclear whether endorsement or belief is the appropriate attitude to have toward claims in those circumstances. There are thus both general and specific reasons to worry about whether researchers will be reliable at distinguishing when to make advocacy role or evidential role assertions.

While I admit that researchers are unlikely to make explicit the distinction between the two roles, I do think people are sensitive to the distinction. This sensitivity explains why few (honest) researchers are tempted to assert claims about evidence they are unsure of, but are willing to assert their theories. Just how reliable people will be in making these distinctions will depend on the details of their circumstances, and there will be borderline cases. Still, I think researchers are reliable enough much of the time. Moreover, and more importantly, I think an acceptance of EQUD would improve people's ability to make these distinctions. This is part of the normative benefit of the theory of endorsement and the EQUD model: it offers prescriptive guidance concerning when to make certain assertions, and when they should be avoided.

The final potential objection I will consider comes from Moorean propositions (MPs) (Moore 1993) of the form:

(5) p, but I don't believe that p.

Moore's Paradox is that it seems absurd or contradictory to assert or even believe sentences of this form, despite their consistency. (Sorensen 1988, 2018; Williams 2015). These Moorean propositions seem intuitively irrational to believe and unwarranted to assert.[33]

MPs pose an apparent problem for EQUD. It predicts that sentences with a form like (5) should be perfectly felicitous in research contexts. According to EQUD, it seems that Gerry should be able to say:

(6) Dogs were domesticated twice, but I don't believe dogs were domesticated twice.

But (6) still sounds absurd, even uttered at an evolutionary biology conference. Thus, EQUD seems to make a false prediction. A solution to this problem must explain why MPs seem absurd, and why they seem inappropriate to assert, despite the truth of EQUD.

There are three considerations that together dissolve this Moorean problem for EQUD. First, a resolution of Moore's Paradox must explain why MPs are absurd to think, as well as to assert. Simply believing (5) leads to the intuition of absurdity. This suggests that an explanation of the absurdity of Moorean propositions themselves is required, and not merely assertions of them. So, I think Moore's paradox requires a solution like Sorensen's (1988), which explains Moorean absurdity in both thought and speech.[34]

Sorensen argues that MPs like (5) are *blindspots*: propositions which cannot be rationally believed by particular subject, despite being consistent and even

knowable by others. This is because believing an MP commits the subject to believing inconsistent propositions, which is clearly irrational. For instance, suppose I believe (6). Then, from the first conjunct, I can infer that I believe dogs were domesticated twice. But the second conjunct states I do not believe dogs were domesticated twice. Hence, I believe inconsistent things (or would if I made simple, valid inferences). This explains the feeling of absurdity or contradictoriness about Moorean propositions. Moreover, that an MP is a blindspot is a feature of the proposition itself. This explains why sentences like (6) should sound absurd regardless of the context we find them in: they are always blindspots to belief, and thus will always have the feeling of being contradictory or absurd. EQUD thus does not need to provide an additional explanation of the absurdity of (6).

The second consideration is that some assertions of MPs seem warranted, despite their absurdity. Research contexts provide a number of such examples. Hájek (2007) and Turri (2010) both argue that eliminative materialist philosophers are committed to omissive MPs like "Eliminativism is true but I don't believe it." Hajek points out that a large number of philosophical positions are similarly committed to MPs, especially given the strength of the pessimistic induction objection applied to philosophy. Assertions of these MPs by philosophers seem warranted: for instance, it is no objection to eliminativism that it licenses such assertions.[35] Thus, many philosophers are already committed to MPs. EQUD explains how researchers can rationally make such commitments, despite their absurdity. Namely, philosophers are endorsing these claims, rather than believing them. Believing them will always be absurd, since they are blindspots.

Third, there are independent reasons why assertions like (6) will be uncommon in research domains, having to do with the advocacy role of assertion. In present conditions, asserting an MP like (6) may work to undermine a researcher's advocacy of their theory. Stating that one does not believe a claim usually undermines efforts to advocate that claim. As an illustration of this, consider a defense lawyer who is dutifully defending a client, despite all of the evidence of the client's guilt. The lawyer may not believe her client is innocent, given this evidence, and this might be common knowledge to everyone in the courtroom. It would still be inappropriate for the lawyer to say, "My client is innocent, but I don't believe that." This is because it would give the appearance of insincerity, and undermine her case. Similarly, we can explain why Gerry should not utter (6): it would undermine her advocacy. In the future, if endorsement and EQUD were to gain wide acceptance, this might change.

Conclusion

I have argued that the EQUD model provides the best account of assertion in research contexts. It accounts for both advocacy role and evidential role assertions, and how both can be warranted in the same conversation. It also explains how disagreement in research contexts can be genuine and produc-

tive, while being reasonable and faultless. Thus, the EQUD model meets all three desiderata for a theory of assertion in research contexts. Moreover, the success of EQUD provides additional support for the theory of endorsement, and for the QUD model of discourse pragmatics more generally.[36]

Notes

1. For instance, Cohen (1995), Livengood, Sytsma, Feltz, Scheines, and Machery (2010), Van Fraassen (1980), Frances (2010), Whitt (1990) R. Laudan (1987) and Hájek (2007). Moreover, (Goldberg (2013, 2015), and Barnett (2019)) have also recognized the need for a new propositional attitude in philosophy.

2. The literature on speech acts, and on assertion in particular, is vast and I will not attempt to completely summarize it here. For an overview and additional background on this literature, see Brown and Cappelen (2011); MacFarlane (2011); Pagin (2016).

3. There are also normative updating accounts: the asserter updates the context by guaranteeing the truth of the content asserted, and committing themselves to defending. Normative updating is endorsed by MacFarlane 2011 and McKinnon 2015).

4. For more on the success of KNA, see Brown and Cappelen (2011); MacFarlane (2011); Pagin (2016); Schaffer (2008); Williamson (2000) and Goldberg (2015).

5. For instance, for belief (Bach 2008; Grice 1991), certainty (Beddor 2019; Stanley 2008), justification (Kvanvig 2011), or justified belief (Douven 2006; Lackey 2007).

6. For examples of these kinds, see Sosa (2015) and Schaffer (2008). Schaffer appeals to the kind of information updating account of assertion I prefer, but adds a question-sensitive knowledge norm to it.

7. One might be tempted to suggest that these are not assertions but a different kind of speech act. I will consider this objection in more detail in the final section.

8. I will focus discussion on Goldberg's account, as he specifically considers assertions in research contexts, and the differences between the two views will not affect my discussion. DeRose (2016), and Gerken (2014, 2015) also provide contextually sensitive accounts, but tie them to contextualism about knowledge, and thereby have greater difficulty with renegade assertions.

9. Goldberg ultimately modifies the account so that the standard is set by what it is reasonable to believe about the mutual beliefs interlocutors have (2015, 266). This detail will not be relevant here.

10. See, for instance, Bonner, Baumann, and Dalal (2002); Geil and Moshman (1998); Kerr, MacCoun, and Kramer (1996); Kerr and Tindale (2004); Laughlin, Bonner, and Miner (2002); Laughlin and Ellis (1986); Mercier (2016); Mercier and Sperber (2011); Resnick, Salmon, Zeitz, Wathen, and Holowchak (1993). For an overview of this literature, see Mercier and Sperber (2011) and Mercier (2016).

11. This distinction is non-coincidentally similar to the logical empiricist distinction between theoretical statements and observational reports (see Creath 2017 and Soames 2005). However, it does not require commitment to logical empiricism.

12. For example, Goldberg says of an epistemologist that "...in light of what she reasonably regards as mutually believed among philosophers working in epistemology, she anticipates that her audience will expect that for any assertion she makes, she will be in a position to provide a defense of the assertion in question satisfying the standards for epistemology. ... it need merely conform to professional standards (of rigor, clarity, responsiveness to prevailing reasons, and so on" (2015, 261).

13. Here, I am following Schaffer (2008).

14. This notion of endorsement is inspired by the acceptance/belief distinction, especially by the work of L.J. Cohen (1989), Levi (1980), Maher (1993), and Van Fraassen (1980). Recently, several other philosophers have recognized the need for a provisional acceptance attitude of some kind, e.g., Goldberg (2013), McKaughan (2007), Elgin (2010), and Barnett (2019). I have argued that endorsement does the best job of playing this provisional acceptance role (Fleisher 2018).

15. Here I am following Van Fraassen (1980) and Whitt (1990), who suggest that scientific acceptance has this feature as well.

16. The theory of endorsement is compatible with a wide variety of views about the nature of successful inquiry. I am inclined toward a version of veritism Goldman (1986).

17. This particular intrinsic/extrinsic distinction is inspired by Steel (2010), though I develop it differently. Lougheed and Simpson (2017) propose a similar distinction.

18. Several philosophers have pointed to considerations that I think are extrinsic epistemic reasons, e.g., McKinnon's (2015) "distal" epistemic considerations. Longino's (1990; 1994) theoretical and social virtues; and Solomon's (2007) beneficial decision "vectors."

19. For these cases, and arguments that they are irrational, see Firth (1981), Jenkins (2007), Berker (2013), and Greaves (2013).

20. This discussion helps show why endorsement is preferable for promoting distribution of labor to a theory describing researchers as merely role-playing or pretending. Endorsement's resiliency is lacking from pretense. Moreover, as argued below, endorsement plays the role of making advocacy assertions sincere. Similarly, it helps explain researcher's felt sincerity when advocating their views, even when adopting views largely for social epistemic reasons. Endorsement also accounts for researchers identifying with their views, and desiring their success, even where that success is unlikely. It can do these things because it is an attitude of commitment. For more on these points, see (2018).

21. For support of these claims see Roberts (2012) and Beddor and Egan (2018). Schaffer (2008) also appeals to the model in constructing a contrastivist knowledge norm.

22. Generally, Roberts thinks there will only be a single immediate question under discussion at a time. I propose loosening this restriction, for reasons that will become clear below.

23. For more on this distinction, see McKinnon (2015).

24. In other words, uptake considerations do much of the work in determining what norms govern assertions. For the idea of uptake considerations, see Egan (2014).

25. One might worry than any such standards are still too high to vindicate evidential assertions. One of the reasons cited above to doubt theories is the pessimistic induction (L. Laudan 1978; Psillos 1999). Given the theory-ladenness of observation and evidence (Kuhn 1970), the PI might give reason to doubt evidential claims as well. However, I suspect that evidential role claims will not be nearly so susceptible to the PI as theories themselves. Answers to high-stack, evidential questions are the sorts of things that persist, in some form or other, even as paradigms or traditions change. But even if this is not right, there is still plausibly some distinction between theory-laden evidence, and theories themselves. Some importantly distinct standard applies to assertions of evidence as compared to assertions of theories. This is all that is required for EQUD. The model is actually compatible with various forms of anti-realism.

26. For an explanation of the idea of faultless disagreement, see Egan (2014).

27. Goldberg (2015, 284) similarly argues for a sincerity requirement on assertion based on an attitude of commitment weaker than belief.

28. As noted above, I think there are reasons to prefer rational endorsement as a way of providing

this, as opposed to other proposed attitude's like Goldberg's treating-as-defensible/speculation, or Barnett's (2019) inclination.

29. McKinnon's (2015) SRN account may have an easier time accommodating the changes needed to explain the productivity of disagreement, since it appeals to a normative updating account based on those proposed by McDowell (2002) and Brandom (1983). However, this is in virtue of its appeal to updating, and not in virtue of its constitutive norm, for the same reasons just cited concerning the satisfaction of that norm. Furthermore, SRN would need to give up its "expressing knowledge" requirement, and it will also have trouble with providing an appropriate sincerity condition. For these reasons, I think EQUD remains preferable. There isn't space for a complete treatment of SRN here; I will leave it to defenders of that view to attempt the necessary modifications.

30. Montminy and Skolits (2014) argue for a position like this in defending knowledge contextualism from a self-undermining objection.

31. E.g., DeRose (2016); Frances (2013); Goldberg (2015); Hájek (2007).

32. This point still stands even if there is no such thing as assertion, as Cappelen (2011) argues.

33. There are many varieties of MP, but their differences are not crucial here. The version in (5) is actually hardest for EQUD to deal with, so I will focus on it. The existence of MPs is alleged to support KNA, since it offers an explanation for why assertions of MPs are unwarranted (Williamson 2000).

34. I focus on Sorensen's solution here for reasons of preference and concreteness. Many solutions that follow Shoemaker's (1996) priority thesis—that the explanation of the absurdity of believing MPs will also explain the absurdity of asserting MPs—should work to defend EQUD. For an overview of the literature on Moore's Paradox, see (Green & Williams 2007; Williams 2015).

35. For an example from outside inquiry, see Williams (2013).

36. **Acknowledgments**: For helpful comments and feedback on this paper, I would like to thank Austin Andrews, Anne Baril, D Black, Billy Dunaway, Peter van Elswyk, Andy Egan, Megan Feeney, Branden Fitelson, John Greco, Allan Hazlett, Jon Kvanvig, Susanna Schellenberg, Roy Sorensen, Ernest Sosa, and an anonymous referee at this journal.

References

Bach, K. (2008). Applying pragmatics to epistemology. *Philosophical Issues*, *18*(1), 68-88. doi: 10.1111/j.1533-6077.2008.00138.x

Barnett, Z. (2019). Philosophy without belief. *Mind*, *128*(509), 109–138. doi: 10.1093/mind/fzw076

Beddor, B. (2019). Certainty first. *manuscript*.

Beddor, B., & Egan, A. (2018). Might do better: Flexible relativism and the QUD. *Semantics and Pragmatics*, *11*. doi: 10.3765/sp.11.7

Berker, S. (2013). Epistemic teleology and the separateness of propositions. *Philosophical Review*, *122*(3), 337–393. doi: 10.1215/00318108-2087645

Bonner, B. L., Baumann, M. R., & Dalal, R. S. (2002). The effects of member expertise on group decision-making and performance. *Organizational Behavior and Human Decision Processes*, *88*(2), 719–736. doi: 10.1016/S0749-5978(02)00010-9

Brandom, R. (1983). Asserting. *Noûs*, 637–650. doi: 10.2307/2215086

Brown, J., & Cappelen, H. (Eds.). (2011). *Assertion: New philosophical essays*. Oxford, New York: Oxford University Press.

Cappelen, H. (2011). Against Assertion. In J. Brown & H. Cappelen (Eds.), *Assertion: New philosophical essays*. Oxford University Press.

Cohen, L. J. (1989). Belief and acceptance. *Mind*, *98*(391), 367-389. doi: 10.1093/mind/XCVIII.391.367

Cohen, L. J. (1995). *An essay on belief and acceptance* (Reprint edition ed.). Oxford: Oxford University Press.

Creath, R. (2017). Logical empiricism. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2017 ed.). URL = <https://plato.stanford.edu/archives/fall2017/entries/logical-empiricism/>.

Daley, J. (2017). *New study has a bone to pick with dog domestication findings.* https://www.smithsonianmag.com/smart-news/study-suggests-dogs-were-domesticated-once-40000-years-ago-180964101/.

De Cruz, H., & De Smedt, J. (2013). The value of epistemic disagreement in scientific practice: The case of homo Floresiensis. *Studies in History and Philosophy of Science Part A*, *44*(2), 169–177. doi: 10.1016/j.shpsa.2013.02.002

DeRose, K. (2002). Assertion, knowledge, and context. *Philosophical Review*, *111*(2), 167-203. doi: 10.1215/00318108-111-2-167

DeRose, K. (2016). *The appearance of ignorance: Knowledge, skepticism and context*, (Vol. 2). Oxford: Oxford University Press.

Douven, I. (2006). Assertion, knowledge, and rational credibility. *Philosophical Review*, *115*(4), 449-485. doi: 10.1215/00318108-2006-010

Egan, A. (2014). There's something funny about comedy: A case study in faultless disagreement. *Erkenntnis*, *79*(S1), 73–100. doi: 10.1007/s10670-013-9446-3

Elgin, C. Z. (2010). Persistent disagreement. In R. Feldman & T. A. Warfield (Eds.), *Disagreement.* Oxford: Oxford University Press.

Firth, R. (1981). Epistemic merit, intrinsic and instrumental. *Proceedings and Addresses of the American Philosophical Association*, *55*(1), 5–23. doi: 10.2307/3131397

Fleisher, W. (2018). Rational endorsement. *Philosophical Studies*, *175*(10), 2649–2675. doi: 10.1007/s11098-017-0976-4

Frances, B. (2010). The reflective epistemic renegade. *Philosophy and Phenomenological Research*, *81*(2), 419–463. doi: 10.1111/j.1933-1592.2010.00372.x

Frances, B. (2013). Philosophical renegades. In D. Christensen & J. Lackey (Eds.), *The Epistemology of Disagreement.* Oxford University Press Oxford.

Frantz, L. A., Mullin, V. E., Pionnier-Capitan, M., Lebrasseur, O., Ollivier, M., Perri, A., … Dimopoulos, E. A. (2016). Genomic and archaeological evidence suggest a dual origin of domestic dogs. *Science*, *352*(6290), 1228–1231. doi: 10.1126/science.aaf3161

Geil, D., & Moshman, M. (1998). Collaborative reasoning: Evidence for collective rationality. *Thinking & Reasoning*, *4*(3), 231–248. doi: 10.1080/135467898394148

Gerken, M. (2014). Same, same but different: The epistemic norms of assertion, action and practical reasoning. *Philosophical Studies*, *168*(3), 725–744. doi: 10.1007/s11098-013-0156-0

Gerken, M. (2015). The epistemic norms of intra-scientific testimony. *Philosophy of the Social Sciences*, *45*(6), 568–595. doi: 10.1177/0048393115600527

Goldberg, S. (2013). Defending philosophy in the face of systematic disagreement. In D. Machuca (Ed.), *Disagreement and skepticism* (pp. 277–94). New York: Routledge.

Goldberg, S. (2015). *Assertion*. Oxford: Oxford University Press.

Goldman, A. I. (1986). *Epistemology and cognition*. Cambridge, MA: Harvard University Press.

Goldman, A. I. (2001). Experts: Which ones should you trust? *Philosophy and Phenomenological Research*, *63*(1), 85-110. doi: 10.2307/3071090

Greaves, H. (2013). Epistemic decision theory. *Mind*, *122*(488), 915-952. doi: 10.1093/mind/fzt090

Green, M., & Williams, J. N. (2007). Introduction. In M. S. Green & J. N. Williams (Eds.), *Moore's Paradox: New Essays on Belief, Rationality, and the First Person*. Oxford: Oxford University Press.

Grice, P. (1991). *Studies in the way of words*. Cambridge, MA: Harvard University Press.

Hájek, A. (2007). My philosophical position says P and I don't believe P. In M. S. Green & J. N. Williams (Eds.), *Moore's paradox: New essays on belief, rationality, and the first person*. Oxford: Oxford University Press.

Jenkins, C. (2007). Entitlement and rationality. *Synthese*, *157*(1), 25–45. doi: 10.1007/s11229-006-0012-2

Kerr, N. L., MacCoun, R. J., & Kramer, G. P. (1996). Bias in judgment: Comparing individuals and groups. *Psychological Review*, *103*(4), 687. doi: 10.1037/0033-295X.103.4.687

Kerr, N. L., & Tindale, R. S. (2004). Group performance and decision making. *Annual Review of Psychology*, *55*(1), 623-655. doi: 10.1146/annurev.psych.55.090902.142009

Kitcher, P. (1990). The division of cognitive labor. *The Journal of Philosophy*, *87*(1), 5-22. doi: 10.2307/2026796

Kuhn, T. S. (1970). *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Kvanvig, J. (2011). Norms of assertion. In J. Brown & H. Cappelen (Eds.), *Assertion: New philosophical essays* (pp. 233–250). Oxford University Press.

Lackey, J. (2007). Norms of Assertion. *Noûs*, *41*(4), 594-626. doi: 10.1111/j.1468-0068.2007.00664.x

Larson, G., Karlsson, E. K., Perri, A., Webster, M. T., Ho, S. Y., Peters, J., ... Fredholm, M. (2012). Rethinking dog domestication by integrating genetics, archeology, and biogeography. *Proceedings of the National Academy of Sciences*, *109*(23), 8878–8883. doi: 10.1073/pnas.1203005109

Laudan, L. (1978). *Progress and its problems: Towards a theory of scientific growth*. Berkeley: Univ of California Press.

Laudan, R. (1987). The rationality of entertainment and pursuit. In *Rational changes in science* (pp. 203–220). Dordrecht: Springer.

Laughlin, P. R., Bonner, B. L., & Miner, A. G. (2002). Groups perform better than the best individuals on letters-to-numbers problems. *Organizational Behavior and Human Decision Processes*, *88*(2), 605–620. doi: pii/S0749597802000031

Laughlin, P. R., & Ellis, A. L. (1986). Demonstrability and social combination processes on mathematical intellective tasks. *Journal of Experimental Social Psychology*, *22*(3), 177–189. doi: pii/0022103186900223

Levi, I. (1980). *The enterprise of knowledge: An essay on knowledge, credal probability, and chance*. Cambridge, MA: MIT Press.

Lewis, D. (1979). Scorekeeping in a Language Game. *Journal of Philosophical Logic*, *8*(1), 339–359. doi: 10.1007/BF00258436

Livengood, J., Sytsma, J., Feltz, A., Scheines, R., & Machery, E. (2010, June). Philosophical temperament. *Philosophical Psychology*, *23*(3), 313-330. doi: 10.1080/09515089.2010.490941

Longino, H. E. (1990). *Science as social knowledge: Values and objectivity in scientific inquiry*. Princeton: Princeton University Press.

Longino, H. E. (1994). In search of Feminist Epistemology. *The Monist*, *77*(4), 472–485. doi: 10.5840/monist199477428

Lougheed, K., & Simpson, R. M. (2017). Indirect epistemic reasons and religious belief. *Religious Studies*, *53*(2), 151–169. doi: 10.1017/S0034412516000202

MacFarlane, J. (2011). What is assertion? In J. Brown & H. Cappelen (Eds.), *Assertion*. Oxford: Oxford University Press.

Maher, P. (1993). *Betting on theories*. Cambridge: Cambridge University Press.

McDowell, A. (2002). Trust and information: The role of trust in the social epistemology of information science. *Social Epistemology*, *16*(1), 51–63. doi: 10.1080/210132798

McKaughan, D. (2007). *Toward a richer vocabulary for epistemic attitudes* (Unpublished doctoral dissertation). University of Notre Dame.

McKinnon, R. (2015). *The norms of assertion: Truth, lies, and warrant* (2015edition ed.). Houndmills, Basingstoke, Hampshire ; New York, NY: Palgrave Macmillan.

Mercier, H. (2016). The argumentative theory: Predictions and empirical evidence. *Trends in Cognitive Sciences*, *20*(9), 689-700. doi: 10.1016/j.tics.2016.07.001

Mercier, H., & Sperber, D. (2011, April). Argumentation: Its adaptiveness and efficacy. *Behavioral and Brain Sciences*, *34*(2), 94-111. doi: 10.1017/S0140525X10003031

Montminy, M., & Skolits, W. (2014). Defending the coherence of contextualism. *Episteme*, *11*(3), 319–333. doi: 10.1017/epi.2014.13

Moore, G. E. (1993). Moore's paradox. In T. Baldwin (Ed.), *G.E. Moore: Selected writings* (1edition ed.). London; New York: Routledge.

Muldoon, R. (2013). Diversity and the division of cognitive labor. *Philosophy Compass*, *8*(2), 117–125. doi: 10.1111/phc3.12000

Pagin, P. (2016). Assertion. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2016 ed.). URL = <https://plato.stanford.edu/archives/win2016/entries/assertion/>.

Psillos, S. (1999). *Scientific realism: How science tracks truth* (1edition ed.). London ; New York: Routledge.

Resnick, L. B., Salmon, M., Zeitz, C. M., Wathen, S. H., & Holowchak, M. (1993). Reasoning in conversation. *Cognition and Instruction*, *11*(3-4), 347–364. doi: 10.1207/s1532690xci1103\&4_11

Roberts, C. (2004). Context in dynamic interpretation. In L. R. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp. 197–220). Malden, MA: Blackwell.

Roberts, C. (2012). Information structure in discourse: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics*, *5*, 1–69. doi: 10.3765/sp.5.6

Schaffer, J. (2008, September). Knowledge in the image of assertion. *Philosophical Issues*, *18*(1), 1-19. doi: 10.1111/j.1533-6077.2008.00134.x

Šešelja, D., & Straßer, C. (2014). Epistemic justification in the context of pursuit: A coherentist approach. *Synthese*, *191*(13), 3111–3141. doi: 10.1007/s11229-014-0476-4

Shoemaker, S. (1996). *The first-person perspective and other essays*. Cambridge: Cambridge University Press.

Soames, S. (2005). *Philosophical analysis in the twentieth century, volume 1: The dawn of analysis*. Princeton: Princeton University Press.

Solomon, M. (1994). Social empiricism. *Noûs*, *28*(3), 325–343. doi: 10.2307/2216062

Solomon, M. (2007). *Social empiricism*. Cambridge, MA: MIT press.

Sorensen, R. (1988). *Blindspots*. Oxford: Clarendon Press.

Sorensen, R. (2018). Epistemic paradoxes. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Summer 2018 ed.). URL = <https://plato.stanford.edu/archives/sum2018/entries/epistemic-paradoxes/>.

Sosa, E. (2015). *Judgment and agency*. Oxford: Oxford University Press.
Stalnaker, R. (1984). *Inquiry*. Cambridge: Cambridge University Press.
Stanford, K. (2017). Underdetermination of scientific theory. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2017 ed.). URL = <https://plato.stanford.edu/archives/win2017/entries/scientific-underdetermination/>.
Stanley, J. (2008, September). Knowledge and certainty. *Philosophical Issues*, *18*(1), 35-57. doi: 10.1111/j.1533-6077.2008.00136.x
Steel, D. (2010). Epistemic values and the argument from inductive risk. *Philosophy of Science*, *77*(1), 14–34. doi: 10.1086/650206
Strevens, M. (2003, February). The role of the priority rule in science. *The Journal of Philosophy*, *100*(2), 55-79. doi: 10.5840/jphil2003100224
Turri, J. (2010). Refutation by elimination. *Analysis*, *70*(1), 35–39. doi: 10.1093/analys/anp138
Van Fraassen, B. C. (1980). *The scientific image*. Oxford; New York: Clarendon Press ; Oxford University Press.
Weisberg, M., & Muldoon, R. (2009). Epistemic landscapes and the division of cognitive labor. *Philosophy of Science*, *76*(2), 225–252. doi: 10.1086/644786
Whitt, L. A. (1990). Theory pursuit: Between discovery and acceptance. *PSA: Proceedings of the biennial meeting of the philosophy of science association*, *1*, 467–483.
Whitt, L. A. (1992). Indices of theory promise. *Philosophy of Science*, *59*(4), 612–634. doi: 10.1086/289698
Williams, J. N. (2013). Moore's paradox and the priority of belief thesis. *Philosophical Studies*, *165*(3), 1117–1138. doi: 10.1007/s11098-012-9997-1
Williams, J. N. (2015). Moore's paradox in speech: A critical survey. *Philosophy Compass*, *10*(1), 10–23. doi: 10.1111/phc3.12188
Williamson, T. (1996). Knowing and asserting. *Philosophical Review*, *105*(4), 489-523. doi: 10.2307/2998423
Williamson, T. (2000). *Knowledge and its limits*. Oxford: Oxford University Press.
Yong, E. (2016). *A new origin story for dogs.* https://www.theatlantic.com/science/archive/2016/06/the-origin-of-dogs/484976/.
Zollman, K. J. S. (2010). The Epistemic Benefit of Transient Diversity. *Erkenntnis*, *72*(1), 17–35. doi: 10.1007/s10670-009-9194-6