Abstract: I evaluate non-factive or truth-insensitive accounts of the ordinary concepts used to evaluate beliefs, evidence, assertions, and decisions. Recent findings show that these accounts are mistaken. I propose three hypotheses regarding how philosophers defending these accounts got things so wrong. I also consider one potential consequence for the discipline.

Keywords: truth; belief; evidence; assertion; decision; philosophical method

Introduction

Philosophical research often aims to illuminate familiar and important concepts from our everyday lives, such as knowledge, morality, belief, assertion, or freedom. This is a worthwhile project because these concepts reflect how we ordinarily view the world and our place in it. As one great twentieth-century philosopher memorably put it, these concepts help constitute “the manifest image,” our shared commonsense framework for understanding ourselves and the world around us. So delineating them is “a task of the first importance” (Sellars 1963, ch. 1).

Philosophers have long assumed that patterns in ordinary usage and commonsense should

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constrain philosophical theorizing about such concepts. Aristotle wrote that a philosophical theory of the good life should be evaluated ‘in the light [of] … what is commonly said about it’ (Aristotle 350 BCE/1941, 1098b, 9-11). Led by J.L. Austin, ordinary language philosophers claimed that ‘ordinary language’ should get ‘the first word’ in philosophical theorizing (Austin 1956, p. 11). John Locke claimed that a theory of knowledge should be informed by how we ordinarily act and talk about knowledge (Locke 1690/1975, bk. 4.11.3-8). Similarly, many lines of research in contemporary epistemology are based on assumptions about ordinary thought and talk about knowledge, or ‘commonsense epistemology’ (for a review, see Turri 2016a). One reason for this methodological preference is that if theorizing disconnects from commonsense views, it will not be about the concepts in question. In short, the theorist will have changed the subject.

The Non-factive Approach

Suppose that Maria is a watch collector who owns over ten thousand watches. She cannot keep track of all her watches by memory alone, so her accountant maintains a detailed inventory of them. Maria knows that the inventory isn’t perfect, but it is extremely accurate. Someone asks Maria, ‘Does your collection contain a 1990 Rolex?’ Maria consults the inventory and it says that she does have one. And this is just another occasion where the inventory is right. Does Maria’s evidence justify her in believing that the collection contains a 1990 Rolex? Now imagine a case exactly like the one just described except that it is Mario who collects watches and maintains an
inventory, and this is one of those rare cases where the inventory is wrong. Does Mario’s evi-
dence justify him in believing that the collection contains a 1990 Rolex? Can the fact that the
inventory is right in the one case but not the other create a difference in what Maria and Mario
are justified in believing?

According to a dominant view in contemporary epistemology — the non-factive or truth-
insensitive approach to belief evaluation — the answer is a resounding ‘no’. On this view, Maria
and Mario are equally justified because they have ‘exactly the same reasons for believing exactly
the same thing’ (Feldman 2003, p. 29; see also Conee and Feldman 2004). Their evidence and
justification are equivalent across the cases, we are told, despite the variation in truth.

Focusing on more extravagant examples, consider a staple of contemporary epistemology,
the notorious thought experiment involving a radically deceived ‘brain in a vat’.

Could you not be floating in a tank while super-psychologists stimulate your brain
electrochemically to produce exactly the same experiences you are now having, or
even to produce the whole sequence of experiences you have had in your lifetime thus
far? (Nozick 1981, p. 167)

Leading epistemologists tell us that it is ‘beyond question at an intuitive level’ that such victims
are ‘justified’ in their beliefs about their surroundings (BonJour 2003, pp. 185-186). ‘The intu-
ition’ here, we are told, is that you and your victimized counterpart in the super-psychologist’s
tank have ‘equally good evidence’ for your respective beliefs (Russell 2001, p. 38; see also Co-
hen 1984, pp. 281-2). ‘Intuitively,’ the fact that your victimized counterpart is systematically de-
ceived ‘makes no difference at all’ (Wedgwood 2002, p. 349). We have an ‘overpowering incli-
nation to think’ — indeed, ‘we are convinced’ — that the two of you have equally good evidence (Fumerton 2006, p. 93). This is known as ‘the parity intuition’ (Turri 2015a).

Philosophers who defend opposing views (e.g. Sutton 2007; see also Goldman 1979, Greco 2010, Littlejohn 2013) are accused of defending an ‘extraordinary’ and ‘dissident’ doctrine lacking in ‘intuitive credentials’ (Conce 2007) that diverges from the ‘historically standard and seemingly obvious’ account (BonJour 2003, p. 7). The factive or truth-sensitive approach, we are told, deviates from ‘the usual’ and ‘traditional’ approach to belief evaluation, according to which there is no essential connection between justification and truth; moreover, the traditional approach is concerned with the ‘ordinary concept’ of justification, so truth-sensitive theories ‘are not concerned’ with justification as it is ordinarily understood (Chisholm 1989, pp. 75-6; see also Cohen 1984, pp. 283-4, 293 n. 1). In short, in the manifest image, justification is truth-insensitive.

Evidence

Surprisingly, those claiming that the ordinary concept of justification is truth-insensitive have not supported their claims with relevant evidence. Equally surprisingly, theoretical debate proceeded for decades without anyone seriously challenging the unsubstantiated claims or testing whether they are true. If we have an overpowering inclination to think that truth is irrelevant to justification, if our very concepts indicate that truth makes no difference to justification, then that should be readily detectable in people’s judgments.

A recent series of studies investigated precisely this issue. More specifically, researchers
tested how people ordinarily evaluate beliefs in relation to truth. In one study, participants read a
simple scenario about an agent and evaluated the agent’s belief (Turri 2015a, Experiment 1). Re-
searchers manipulated whether the relevant proposition was true or false. One of the scenarios
tested was very similar to the one about Maria the watch collector, discussed above:

Maria is a watch collector who owns over ten thousand watches. She cannot keep
track of all her watches by memory alone, so her accountant maintains a detailed in-
ventory of them. Maria knows that the inventory isn’t perfect, but it is extremely accu-
rate. Someone asks Maria, “Do you own a 1990 Rolex Submariner?” Maria consults
the inventory and it says that she does have one. In fact, she does [not] have one.
The only difference between the ‘true’ and ‘false’ versions of the story occurred in the very last
sentence: in the true version she ‘does’ have one, whereas in the false version she ‘does not’.

After reading the scenario, participants recorded a belief evaluation. In order to test belief
evaluation using a range of vocabulary, not just ‘justification,’ researchers manipulated how the
belief evaluation was phrased. More specifically, participants were randomly assigned to receive
one of the following questions:

- What does Maria’s evidence justify her in believing?
- What is Maria justified in believing?
- What should Maria believe?
- What is it rational for Maria to believe?
- What is the responsible thing for Maria to believe?
- What is it reasonable for Maria to believe?
In each case, participants selected from the same six response options:

- “I definitely have one”
- “I have one”
- “I probably have one”
- “I probably do not have one”
- “I do not have one”
- “I definitely do not have one”

For all six ways of phrasing the belief evaluation, the proposition’s truth value strongly affected people’s response. When the proposition was true (i.e. she did have one), the central tendency was to select the flat-out belief, ‘I have one.’ But when the proposition was false (i.e. she did not have one), the central tendency was to select the probabilistic, ‘I probably have one.’ This pattern occurred across all six ways of phrasing the evaluation and multiple narrative contexts. These results show that our ordinary ways of evaluating belief and evidence are truth-sensitive. (For additional evidence supporting this conclusion, see Turri 2015b.)

In another study, people compared the evidence of a normally embodied human to the evidence of his victimized ‘brain in a vat’ twin (Turri 2015a, Experiment 3). Participants read a scenario about two agents, Harvey the human and Louis the brain in a vat:

Harvey is a healthy human adult sitting on his patio in a fine neighborhood. Harvey is currently enjoying a variety of perfectly vivid sensory experiences, thanks to a team of scientists who helped save his life with a supercomputer that detected a heart condition. Harvey was unaware that scientists could do that, just as he was un-
aware that he had a bad heart condition in the first place. Everything seems perfectly normal to him now. The scientists monitor him regularly. As Harvey sits there on his patio, it seems as though a reddish four-legged animal with pointy ears and bushy tail is walking through a nearby flowerbed. To Harvey, it seems like he is looking at a fox. His experiences seem entirely natural. And things are exactly as they seem to Harvey: as he sits there on his patio, he is looking at a fox.

Louis is a healthy human brain sitting in a vat of fluid in a fine laboratory. Louis is currently enjoying a variety of perfectly vivid sensory experiences, thanks to a team of scientists creating them through a supercomputer that is hooked up to Louis. Louis was unaware that scientists could to that, just as he was unaware that his body died and he was put in a vat in the first place. Everything seems perfectly normal to him now. The scientists monitor him regularly. As Louis sits there in his vat, it seems as though a reddish four-legged animal with pointy ears and bushy tail is walking through a nearby flowerbed. To Louis, it seems like he is looking at a fox. His experiences seem entirely natural. But things are not as they seem to Louis: as he sits there in his vat, he is not looking at a fox.

After reading the scenario, participants were asked, ‘Who has better evidence for thinking that he’s looking at a fox?’ There were seven response options:

- Definitely Harvey
- Harvey
- Probably Harvey
- Neither
- Probably Louis
- Louis
- Definitely Louis

The central tendency was to evaluate Harvey’s evidence more favorably. The most common response was ‘Definitely Harvey’ and nearly 80% of participants agreed or were inclined to agree that Harvey’s evidence was better. This same pattern occurred regardless of the order in which participants read the paragraphs about Harvey and Louis, and regardless of whether participants answered a series of comprehension questions before deciding who had better evidence. These results show that on the ordinary way of evaluating belief and evidence, a brain in a vat’s evidence is inferior and, thus, that ‘the parity intuition’ is not widely shared.

These findings on the truth-sensitivity of belief evaluations are mirrored by other recent findings on evaluation of assertions and decisions. Related to the unsubstantiated claims that the ordinary concept of justification is truth-insensitive, some philosophers have also claimed that our ordinary concepts of what a person should assert or decide to do are truth-insensitive. But a substantial and growing body of studies has found that these evaluative concepts are also deeply sensitive to whether a proposition asserted or acted upon is true (Turri 2013; Turri and Blouw 2015; Turri 2015c; Turri 2015d; Turri 2016b; Turri 2016c; Turri 2016d; Turri in press; Turri and Buckwalter in press; Turri, Friedman and Keefner in press).

For example, one study on assertability tested the case of Maria, described above. Instead of asking participants about what Maria should believe, researchers asked what Maria should say
to the person who asked whether she owned a Rolex (Turri 2013). When the inventory was cor-
rect that she owned one, the overwhelming majority judged that she should assert that she has
one. But when the inventory was incorrect and she did not own own, the overwhelming majority
judged that she should not assert that she has one. Instead, the central tendency was to judge that
she should say that she ‘probably’ has one. Another study on decision-making also tested a ver-

tion of Maria’s case. In this version, Maria learns if she owns a certain watch, then she needs to
make an appointment to revise her insurance policy, which will take several hours; but if she
does not own one, then she does not need to make an appointment. When the inventory was cor-
rect that she owned one, the overwhelming majority judged that she should make the appoint-
ment. But when the inventory was incorrect and she did not own own, the overwhelming majori-

ty judged that she should not make the appointment. Interestingly, in many of these studies, re-
searchers also found that the effect of truth-value on what an agent should believe, assert, or de-
cide was mediated by knowledge attributions. This suggests that these evaluative concepts are

sensitive to what is true because they are sensitive to what the agent knows to be true.

Hypotheses

The results just discussed raise a question: how did philosophers get these ordinary evaluative

concepts so wrong? Contemporary epistemology reached a point where it was viewed as a ‘turn’ —
or, in one commentator’s memorable phrase, ‘a fashionable stampede’ (BonJour 2003, p. 8) —
for the field to take seriously the hypothesis that these evaluative concepts are factive or truth-
sensitive. But this means that somehow the field had turned itself in the wrong direction. How did this happen? What explains the misbegotten non-factive or truth-insensitive turn in contemporary epistemology?

One possibility is that philosophers relied on typical judgments about something that is truth-insensitive, which they either misunderstood or misdescribed using vocabulary that, as it turns out, actually expresses highly truth-sensitive evaluations. A prime candidate for this is blamelessness. Early arguments for truth-insensitive theories were based on linking justification and blamelessness (Ginet 1975; Chisholm 1977; Cohen 1984; BonJour 1985; for review and discussion, see Alston 1988; Plantinga 1993). The basic idea is that blamelessness is truth-insensitive, and justification just is blamelessness, so justification is truth-insensitive. A systematically deceived brain in a vat is not to blame for his false beliefs, so those beliefs are justified. Similarly, Maria is not to blame for trusting the highly reliable inventory on those rare occasions when it is wrong, so her beliefs based on the inventory are justified.

However, recent work has demonstrated that justification is not blamelessness, as those categories are ordinarily understood. Instead, ordinary evaluations of belief and evidence are highly truth-sensitive whereas blame attributions are truth-insensitive. In one study, participants read a scenario about an agent, Victor. To Victor it seems that he is having a perfectly ordinary experience of looking at a fox. In the ‘true’ version, things are exactly as they seem: Victor is a normal human looking at a fox. In the ‘false’ version, things are not as they seem: Victor is a normal human but he is not looking at a fox. In the ‘BIV’ (‘brain in a vat’) version, things are not as they seem: Victor is a brain in a vat and he is not looking at a fox. In response to the true version, par-
ticipants judged that Victor has good evidence for thinking that he is looking at a fox, and they judged that he should believe that proposition. But in response to the false and BIV versions, participants judged that Victor only thinks that he has good evidence that he is looking at a fox, and they judged that he only thinks he should believe that proposition. At the same time, in response to all three scenarios, participants strongly judged that Victor should not be blamed for thinking that he is looking at a fox. Overall, then, evaluations of belief and evidence differed strongly between the true version, on one hand, and the false and BIV versions, on another, whereas blame attributions were the same across all three versions. In short, evaluations of belief and evidence were truth-sensitive whereas blame attributions were truth-insensitive (Turri 2015a, Experiment 2).

Thus it could be that philosophers were initially misled into positing that justification is truth-insensitive because they misidentified it with blamelessness, which, ordinarily understood, is truth-insensitive. Some of these philosophers later abandoned the claim that justification is blamelessness, but they continued asserting that justification is truth-insensitive. For example, as one leading epistemologist recently wrote,

While I am, alas, one of those responsible for the idea that being epistemically responsible or satisfying one’s epistemic duties is tantamount to being justified in the internalist [i.e. truth-insensitive] sense, it is in fact relatively easy to see that this is wrong, indeed that being epistemically responsible or satisfying one’s epistemic duties … is not even sufficient for internalist justification. (BonJour 2003, pp. 175-6)

In rejecting the claim that justification is blamelessness, these philosophers did not realize that
they abandoned the mistaken but understandable intuitive basis for claiming that justification is truth-insensitive.

A second possibility is that philosophers fell victim to a common human error. A large body of research in social psychology has shown that the motivation to blame someone often leads people to distort facts and interpret them in a way that justifies their negative reactions. This tendency is known as blame validation (Alicke 1992; Alicke 2000). New research has revealed a related tendency known as excuse validation (Turri 2013; Turri and Blouw 2015). The motivation to exculpate often leads people to distort facts and interpret them in a way that justifies their emotional reaction. For example, when people recognize that someone has blamelessly broken a rule, this can lead them to claim, paradoxically, that no rule was broken at all. Excuse validation is a very robust tendency: it occurs when evaluating a wide range of activities, in both women and men, when the consequences of rule-breaking are trivial and when they are momentous, and when people evaluate other people’s statements about blameless rule-breaking, rather than judging it directly for themselves. There is no reason to believe that philosophers are immune to excuse validation. One hypothesis, then, is that the desire to excuse agents for blamelessly forming false beliefs leads some philosophers to describe the beliefs as ‘justified’ or the agent’s evidence as ‘good’.

A third possibility is that there are actually two ordinary concepts of justification, one truth-sensitive and the other truth-insensitive. For the vast majority of people, the truth-sensitive concept is either the only or the dominant one. However, for a minority of people, the truth-insensitive concept is either the only or the dominant one. Sometime around the 1970s, Anglo-
Phone epistemology was populated by an improbably high proportion of people from the minority. This group reflected on their (dominant) concept and concluded that justification is truth-insensitive. They also concluded that this was the ordinary and traditional concept shared by nearly everybody. This is an instance of the false-consensus effect, whereby we tend to overestimate the extent to which others share our views (for a review, see Marks and Miller 1987).

The three possibilities just reviewed are not intended as an exhaustive list. Neither are they necessarily mutually exclusive.

**Conclusion**

Philosophers can legitimately investigate concepts and theories from nearly any specialized field of inquiry. Some philosophers study the properties of formal languages, the metaphysical implications of quantum mechanics, or the ultimate basis of attribute agreement. These specialized fields investigate phenomena unfamiliar from everyday life, introduce new concepts, and often produce surprising or counterintuitive results, such as the relativity of simultaneity or quantum entanglement. That the results might be counterintuitive or even shocking is not a serious objection, even if it motivates people to seek objections. But when philosophers aim to illuminate important ordinary concepts — to delineate part of the manifest image — stark divergence from commonsense is a warning sign that something has gone seriously wrong.

Leading proponents of truth-insensitivity have repeatedly described their theories as delineating our ordinary concepts, and this is how I have evaluated them. But there could be other le-
gitimate motivations for such theories. Another motivation could be to prescribe different concepts or practices. One might acknowledge that, beyond blamelessness, the concepts we ordinarily use to evaluate beliefs, assertions, and decisions are truth-sensitive but then proceed to argue that they should be abandoned and replaced by truth-insensitive evaluative concepts. I expect that in order to be any good, such arguments must be informed by findings from cognitive and social science on how people actually reason and the likely consequences of adopting prescriptive proposals. Mere appeals to intuition, anecdotal social observation, or armchair generalizations about our psychological tendencies, ordinary behavior, or ‘the tradition’ will not suffice. If a prescription’s proponents cannot provide evidence that it will promote better outcomes, then they cannot expect it to be taken seriously. In this respect, academic philosophy has fallen far behind related fields, such as psychology and artificial intelligence, in leading the way toward conceptual change that could promote social and cultural benefits (e.g. Kosko 1993; Kahneman 2011; Lieberman 2013; Gigerenzer 2014).

Standard practice in Anglophone ‘analytic’ philosophy is to rely on introspection and anecdotal social observation to characterize ordinary concepts. This method has led to many serious mischaracterizations. The findings on truth and belief evaluation (discussed above) are just one example. Other examples include widespread claims about conceptual relationships between knowledge and belief, knowledge and reliability, knowledge and error possibilities, knowledge and context, knowledge and inference, personal identity and the spatial properties of persons, lying and truth-value, moral obligations and ability, moral responsibility and free will, moral responsibility and determinism, and many others (for reviews, see Turri 2016a; Turri under review;
Buckwalter and Turri in press; Buckwalter in press). In each case, our ordinary concepts differ greatly from what philosophers have confidently claimed. The implications of this are potentially significant. I will discuss one.

Many people might be alienated by the verdicts philosophers treat as obvious or commonsensical. For instance, imagine students taking an introductory epistemology course. They are asked to consider a radically deceived brain in a vat undergoing experiences qualitatively similar to those of a normal human. The intuition here, they are told, is that the brain in a vat and normal human are equally justified in all of their beliefs. This intuition contradicts the vast majority of people’s judgment about the case, but it is treated as a touchstone for constructing and evaluating theories of justification. Before long, some students might conclude that they are not good at philosophy (Buckwalter and Stich 2014, section 4). But, I suspect, it is equally likely that students will conclude, along with Thomas Reid, that if this is how philosophers conduct their business, then philosophy is ‘justly ridiculous’ (Reid 1764/1997, p. 21). It is not in the field’s interest to be viewed so negatively, especially because of easily avoidable errors.

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