

Is Knowledge True Belief Plus Adequate Information?

Michael Hannon

Received: 14 July 2013 / Accepted: 30 November 2013
© Springer Science+Business Media Dordrecht 2013

Abstract In *When is True Belief Knowledge?* (2012) Richard Foley proposes an original and strikingly simple theory of knowledge: a subject S knows some proposition p if and only if S truly believes that p and does not lack any important information. If this view is correct, Foley allegedly solves a wide variety of epistemological problems, such as the Gettier problem, the lottery paradox, the so-called ‘value problem’, and the problem of skepticism. However, a central component of his view is that whether a true belief counts as knowledge depends on the importance of the information that one has or lacks. My paper raises doubts about whether there is a non-circular way to distinguish important information from unimportant information. I argue that there is no way to distinguish important information from unimportant information without ultimately making reference to knowledge; thus, Foley’s new theory of knowledge does not achieve its goals.

1 Foley’s View

What must be added to a true belief in order to make it knowledge? Contemporary epistemologists have provided no shortage of answers to this question. Some theorists maintain that a true belief must be the product of a reliable cognitive process in order to qualify as knowledge. Others think that a true belief amounts to knowledge only if it is ‘safe’ in the sense that one’s belief could not have easily been false. Others still maintain that a true belief qualifies as knowledge only if it is creditable to one’s cognitive abilities or intellectual virtues. This is just a small sample of views, all of which assume that what must be added to true belief in order to have knowledge is something related to true belief but distinct from it.

M. Hannon (✉)
Department of Philosophy, Fordham University, Collins Hall 101, 441 E. Fordham Road, Bronx,
NY 10458, USA
e-mail: mhannon09@gmail.com

In *When is True Belief Knowledge?* Richard Foley rejects all contemporary theories of knowledge in favor of a new epistemological view that “has the capacity to reorient the theory of knowledge” (2012: 3). According to Foley, what we need to add to true belief in order to have knowledge is just more true belief. Foley’s central point may be stated as follows:

Foley’s Account

A subject *S* knows that *p* if and only if *S* truly believes that *p* and has adequate information.

Whenever someone has a true belief but not knowledge, there will be important information that she lacks. To know that *p*, there must not be any important gaps in one’s information.¹

Some points of clarification are in order. First, information is understood in terms of true belief; as Foley writes, “having information is a matter of having true beliefs” (3). Second, adequacy is not understood in terms of quantity: even a little information concerning *p* might be enough to know that *p* in many circumstances.² Third, ‘adequate information’ is defined negatively, in terms of information that one lacks: one has adequate information if one is not missing any important truths. What is an important truth? Foley says there is no common feature to important truths. This does not worry Foley, however, because identifying important truths is supposed to be a fairly straightforward task. When examining any normal case in which a subject truly believes that *p* but does not know that *p*, we will find the important missing truth if we look for it.

This last point suggests an easy way to test Foley’s thesis, which I will call ‘Foley’s Test’:

Foley’s Test

If *S* has a true belief that *p* but does not know that *p*, then it ought to be possible to identify a proposition *q* such that *q* is an important truth and *S* does not believe *q* (8).

In order to illustrate how his test works, Foley asks us to consider the following story:

Before leaving her office, Joan always places her laptop on the corner of her desk. Unbeknownst to her, the laptop has just been stolen and is now sitting on the corner of a desk in the thief’s apartment. Joan believes that her laptop is on the corner of a desk, and in fact it is, but she doesn’t know this. (6)

When we apply Foley’s Test to the aforementioned case, we get the following diagnosis: Joan lacks an important true belief about her situation; in particular, she

¹ Foley recognizes that a vast number of truths are associated with any particular situation, so even the most well-informed person would not have *all* truths about a situation. Whether a true belief counts as knowledge thus hinges on whether the missing information is important (5).

² To support this claim, Foley provides the example of a quiz show contestant who recalls the date of the Battle of Marathon from her high school history course, but does not remember that the Greeks won the battle or even that the adversaries were the Greeks and Persians. Often many surrounding truths do not strike us as being important in order for the subject to have knowledge. How much information is needed for knowledge varies from situation to situation (14–15).

is not aware that her laptop has been stolen and that the desk on which it now sits is in the thief's apartment.

A few additional examples will help clarify Foley's view. In standard fake barns cases, a subject *S* forms the true belief that he is looking at a real barn; however, unbeknownst to him, all other barns in the area are mere facades. This person lacks knowledge, according to Foley, because he lacks at least one important truth about his situation: there are numerous highly realistic barn facades in the area. To take another example, consider a typical lottery case in which a person forms the highly justified true belief that she will not win a lottery. Such a person does not know that she will lose because there is important information that she lacks: she "isn't aware which ticket has won the lottery" (8). There is an important gap in her information.

Similar examples abound in epistemology. One notable feature of these cases is that they use the common literary device of providing the audience with information that the subjects of the story lack. We (the audience) are thus put in what Bernard Williams calls 'the examiner situation': the situation in which we know that *p* is true (or false), some subject *S* has asserted that *p* is true, and we ask whether *S* really knows it (Williams 1973: 146). According to Foley, when these stories are told in such a way as to suggest that the missing information is important, we judge that the subject lacks knowledge.³

Foley's view has a lot of explanatory power. He remarkably provides a new theory of knowledge that is highly intuitive, theoretically elegant, and promises to resolve intractable difficulties such as the Gettier problem, the lottery paradox, and the so-called 'value problem'.⁴ However, I worry that a fundamental defect in Foley's account prevents him from solving these problems.

A central component of his view is that one has knowledge only if one doesn't lack any important information. This thesis assumes that we can distinguish important information from unimportant information without making reference to knowledge. As Foley admits at the start of his book, his main thesis—that whenever somebody has a true belief but does not know, there is important information that she lacks—is only philosophically useful if information is "understood independently of knowledge" (3). In the remainder of this essay, I will argue that it is difficult to identify a non-circular way to mark the distinction between important information and unimportant information.

³ Whether or not a true belief is important can be influenced by intellectual and practical considerations, such as what is at stake. This opens the door for views like subject-sensitive invariantism and contextualism; however, Foley doesn't take a definitive stance on this issue (see 21–30). Whether or not his view must imply some version of contextualism depends on whether there is a plausible invariantist treatment of adequate information.

⁴ In a nutshell, here's how he resolves these three worries: the victim in a Gettier scenario will lack some important truth that prevents her from knowing (as illustrated by the case of Joan's stolen laptop); the lottery ticket holder does not know that she has lost, despite her overwhelming statistical evidence, because she is not aware which specific ticket is the winner (72); knowing *p* is usually more valuable than merely truly believing *p* on the assumption that true belief is valuable and that one has at least as much (and usually more) of this valuable commodity when one knows *p* than when one merely believes *p* (67).

2 The Worry of Circularity

Let us first examine how well Foley's view accommodates certain lottery propositions. Imagine that S buys a ticket in a one-thousand-ticket lottery. Presume this is a fair lottery, that the winning ticket (T_{543}) has already been drawn, and that no one has yet seen the winning number. S believes that her ticket (T_{345}) is not the winner. This belief is based on her evidence that there are one thousand tickets and only one winner. Moreover, S's belief is true: she is not the winner. Nonetheless, S does not know that she has lost.

According to Foley, there must be important information that S lacks to explain why she does not have knowledge. If we apply Foley's Test, there must be some proposition q such that q is an important truth and S does not believe q . So which missing proposition has caused an important gap in S's information? Foley says that S does not know that she has lost the lottery because she does not have the following important truth:

Ticket T_{543} is the winner (72).

S does not know which specific ticket is the winner; thus, she does not know that she has lost.

What would it take for S to know that she has lost the lottery? People ordinarily come to know that they have lost a lottery by comparing the numbers on their ticket with the numbers mentioned by an official announcement (a radio announcement, a newspaper, etc.). Presumably, then, if S hears an official announcement that T_{543} is the winner, she may know that she has lost. However, this is not the only way to acquire knowledge that one's ticket is not the winner. Imagine a world in which S hears an announcement about the lottery results that does not state the numbers of the winning ticket, but rather it only announces that S's ticket (T_{345}) is not the winner.⁵ (Perhaps S is an important celebrity and the general public really wants to know whether S has won.) In such circumstances, it seems that S may come to know that she has lost the lottery. If this is correct, then S must have closed a gap in her information by acquiring an important truth. But what important truth has S acquired that she lacked before the announcement? The missing piece of important information was not that S's ticket wasn't the winner. Why not? Because Foley defines information as true belief and S already truly believed that her ticket wasn't the winner. If this is correct, then S may come to know that she has lost even though she has not learned which specific ticket is the winner. This is a counterexample to Foley's diagnosis.⁶

Perhaps S has acquired some other important truth as a result of the announcement. One might argue that Foley has misidentified the important truth that S requires for knowledge, but there is still some important truth that S acquires.

⁵ See also Clayton Littlejohn (2012).

⁶ This point can be strengthened. The proposition < ticket T_{543} is the winner > only closes a gap in S's information because it entails < S's ticket is not the winner >. This raises the question of why < ticket T_{543} is the winner > is important given that S already has the important piece of information < S's ticket is not the winner >.

However, we cannot assume in advance that there is any such important truth without thereby assuming the conclusion for which Foley is arguing. According to Foley, one lacks knowledge *because* one lacks an important nearby truth; a truth is not important *because* one lacks knowledge. It would get the order of explanation backwards to argue as follows:

- (1) At time T_1 (before the announcement) S did not know, but now at T_2 (after the announcement) S knows.
- (2) S has acquired the truth q at T_2 , which she lacked at T_1 .
- (3) Therefore, q must be an important truth.

To retroactively classify any such truth as important would be question-begging because it would define important truths vis-à-vis knowledge. We do not want to trivialize Foley's account by offering the following definition: an important truth =_{df} any nearby truth that is acquired in the process of gaining knowledge. However, it is difficult to see how to avoid this result. There might be some truths that S acquires during a process of acquiring knowledge, but merely stipulating that any such truth is an important one would be circular.

Foley might reply in another way. Perhaps S has not acquired some new and important truth as a result of the announcement; rather, it might be that S's unawareness of which ticket has won is no longer important in the post-announcement situation.⁷ If this truth is no longer important (and if there are no other important gaps in S's information), then S may know that she has lost.

If this is true, we need some story about why this information is no longer important, and that story cannot make reference to knowledge. The circularity worry resurfaces here. The fact that S is not aware of which ticket has won cannot cease to be important simply because S now knows that she has lost—that would be to define important truths in terms of knowledge. Thus, we cannot answer the question “Why is this bit of information no longer important?” with “Because she knows”. Foley acknowledges that there are many ways in which something can be important, and that the importance of a truth will derive from complex links with human concerns and values; nevertheless, it is unclear how to explain why S's unawareness of which ticket has won is important in the pre-announcement situation but not afterwards without circling back to S's knowledge.

Allow me to emphasize this worry from another angle. It is plausible that at least one way to know that I will enjoy dinner tonight is by knowing what is on the menu. If I know that steak is on the menu, then I know I'll enjoy the food. (We may include suitable background conditions to bolster this judgment—i.e. I have always enjoyed the steak at this restaurant.⁸) However, I need not remember what is on the menu in order to know that the food will be enjoyable. I might have forgotten the details of the menu even though I lucidly recall my judgment that the menu items (whatever they were) looked appetizing. In such a case, it seems appropriate to say that I know the food on the menu is tasty (to me) even though I don't know what

⁷ Thanks to an anonymous reviewer for raising this point.

⁸ If you are not convinced that this is a genuine case of knowledge, just change the example to one in which I know that I'll *likely* enjoy dinner.

items are on the menu. So I have some knowledge. If I have knowledge, than I am not missing any important truths, according to Foley's account. However, I am missing the details of the menu. Is this information important?

It's hard to say. Foley must deny that such information is important otherwise we have a direct counterexample to his view (a case of knowledge without adequate information). But on what grounds can we decide whether the missing information about the menu is important? Pre-theoretically, it is quite intuitive to say that knowing what is on the menu is important for knowing that the food will be tasty. Furthermore, it would be question-begging to argue as follows:

- (1) S knows that the food will be tasty.
- (2) If S knows that the food will be tasty, then S isn't missing any important information.
- (3) Therefore, the details of the menu contain no important information (after their initial consumption).

Foley needs a way to establish that this information is not important without making any reference to knowledge. When examining this case, however, I have no clear judgment about whether the missing information is important; thus, identifying such truths is not always a straightforward task. (This is also the point of my revised lottery case.) What we need is an informative way to classify which truths are important, but Foley provides no such account, nor does he think one is needed (30). I suspect that what all these truths will have in common that makes them epistemically important is that they prevent the subject from knowing.

I will raise a related worry by considering a point made by William James in his essay "The Will to Believe" (James 1896). James notes that there are at least two epistemic goals that can pull in opposite directions: the goal of not believing what is false and the goal of believing what is true. These goals pull in different directions because one may successfully achieve the former goal by suspending judgment; however, suspending judgment is obviously insufficient for achieving the latter goal. In general, the more value one gives to not believing what is false, the more it befits one to be cautious or conservative in forming beliefs. On the other hand, the more one values not missing out on true beliefs, the more it makes sense to adopt a liberal attitude about how much information one needs before forming the relevant belief.

James' observation is relevant to our assessment of Foley's thesis. Suppose that you and I both have information I that bears on some hypothesis H . Indeed, let's suppose that we have *all* the same information and similar cognitive capacities (we are epistemic peers). Recognizing that I overwhelmingly supports H , I take up the firmly held true belief that H is correct. If the evidence is strong enough, I may qualify as knowing that H . (Fallibilism assumes that strong evidence for H that doesn't entail H can suffice for knowing H .) However, I notice that you are not willing to say that you know H because you are slightly less confident in your belief that H . You do believe that H , but you assign a slightly lower credence. Despite having the same information, you are less confident that H is correct because you are a bit more cautious when forming firm beliefs. There is a subtle difference in the relative weights that we give to the two epistemic goals (at least with respect to the question at hand). It takes more information for you to strongly believe—and

therefore know—that some hypothesis is correct. Let me further stipulate that you are not dogmatically averse to believing H , or anything like that.

Here we have a case in which two people have the same information but assign slightly different weight to their epistemic goals. As a result of your slightly lowered confidence in H , you are unwilling to say that you know H . Nothing suggests that the manner in which you are responding to our shared information is unreasonable, even though it differs from my own. Given your cognitive goals, the way you are responding to the information seems reasonable. Your judgment also has no tendency to make me insecure in my conviction that I am responding to the information in a reasonable way, given my cognitive goals. Subtly different ways of responding to the same body of information seem equally reasonable, given corresponding differences in the weights that we give to our cognitive goals.⁹ Furthermore, it does not seem as though one of us is mistaken for having a slightly different emphasis on our epistemic goals. This idea does not depend on thinking that “anything goes” with respect to the relative weights that can be permissibly assigned to the two cognitive goals, or even that there is much in the way of permissible variation here at all.

Foley might argue that the different weight that two people assign to their epistemic goals will shape what counts as important information. More specifically, you and I might both lack some piece of information X that bears on whether H is true, but X is important for you and not for me because you assign slightly more weight to the goal of avoiding falsehoods (or at least not firmly believing them). Foley suggests that knowledge cannot be separated from questions about human concerns and values (26). Thus, two people may have the same information and be unaware of the same truths, yet the (slightly higher) value I place on acquiring truths may lead me to regard some such truths as slightly less important than you might judge.

This reply might be correct, but it lands us right back into my earlier worries about how to identify important truths. How do we test whether some truth X about which you and I are unaware is more important to you as a result of the relative value that you place on your epistemic goals? Is there some proposition X such that X is an important truth and you do not believe it? My concern is not just that Foley provides us with no way to answer this question, but more importantly that there is no non-circular way to answer it. Foley might suggest that we can answer this question by looking at the details on a case-by-case basis, but my revised lottery example and my dinner menu example show that this isn't true.¹⁰

⁹ Thomas Kelly (*forthcoming*) has pursued a similar line of argument to reject the Uniqueness Thesis, which says that a body of evidence justifies at most one propositional attitude toward any particular proposition.

¹⁰ According to Foley, there are various aids to help us identify the kind of truths we think a person must be aware of to have adequate information. In particular, gaps in our information may sometimes be explained by reliability accounts, proper function accounts, tracking accounts, justification accounts, and complex links with human concerns and values. This makes his view more ecumenical than its competitors, for he does not fixate upon a particular shortcoming (i.e. an unreliable method, a failure at truth-tracking, etc.) and try to build an entire theory of knowledge around it. However, reliability, truth tracking, etc. are just frequent accompaniments of knowledge and not prerequisites (none of these merits may be required to explain why somebody knows something); moreover, it is unclear how appealing to these considerations will allow Foley to escape the worry raised by my examples.

3 Conclusion

There are paradigm cases in which a missing truth is undeniably important; thus, Foley might classify my examples as “borderline” cases that do not affect the basic insight of the adequate information view. In any normal situation, when S has a true belief p but lacks knowledge, there will be important truths that she lacks. It might not be the job of epistemology to adjudicate the hard cases.¹¹ However, this maneuver is also available to Foley’s competitors, such as the virtue epistemologists, reliabilists, and safety theorists.¹² Thus, this move would make it difficult to see what unique advantages his view has over its rivals, all of which have trouble accommodating the difficult cases.

We do not have a way to classify which truths are important that does not make reference to knowledge. Until we have a plausible way to classify such truths, Foley’s account will be less than fully illuminating.

Acknowledgments I am grateful to Nathan Ballantyne, Chris Cowie, Helen Marsh, and the audience at the Edinburgh Epistemology Conference in 2013. This paper was written while I was funded by the Social Sciences and Humanities Research Council of Canada.

References

- Foley, R. (2012). *When is true belief knowledge?*. Princeton: Princeton University Press.
- James, W. (1896). The will to believe. *New World*, 5, 327–347.
- Kelly, T. *Forthcoming*. How to be an epistemic permissivist. In M. Steup and J. Turri (Eds.) *Contemporary Debates in Epistemology*.
- Littlejohn, C. (2012). Review: When is true belief knowledge? *Notre Dame Philosophical Reviews*.
- Williams, B. (1973). Deciding to believe. In Williams (Ed.) *Problems of the Self*. Cambridge: Cambridge University Press.

¹¹ On page 20 Foley says he isn’t interested in dealing with the ‘hard cases’; however, he is referring to cases in which there is a dispute about whether someone knows something, not cases in which it is clear whether someone knows but unclear whether the information is important (as in the cases I’ve constructed).

¹² For example, Keith Lehrer presents the example of Mr. Truetemp, a man who (unbeknownst to him) has a device implanted in his brain that accurately reads the room temperature and causes a spontaneous belief about that temperature. Such a man has true beliefs about the temperature, and his belief-forming process is reliable, but he does not know what the temperature is in the room. This is supposed to be a problem for process reliabilism, but if the defender of reliabilism can simply dismiss this as a “borderline case”, then Foley’s view has no advantage here.