

v1: 13 September 2023

## Research Article

# Either You Know or You've Gotta Believe

Preprinted: 1 June 2023

Peer-approved: 13 September 2023

© The Author(s) 2023. This is an Open Access article under the CC BY 4.0 license.

Qeios, Vol. 5 (2023)  
ISSN: 2632-3834

Monika Gruber<sup>1</sup>

1. University of Vienna, Vienna, Austria

The standard analysis of knowledge in contemporary epistemology is the view that a subject *S* knows a proposition *p* iff 1.) *p* is true; 2.) *S* believes that *p*; 3.) *S* is justified in believing that *p*. Hence, knowledge is justified true belief (JTB)<sup>1</sup>. The second condition that (propositional) knowledge entails belief is called the entailment thesis and has been considered by the majority as uncontroversial. Numerous accounts of knowledge and belief have been constructed involving entailment thesis granting it a default status. The generally accepted view in today's epistemology is that knowledge is something more than 'merely' belief. Few philosophers argued against the entailment thesis, even if barely any arguments for it have been presented. Some of the earlier voices in contemporary epistemology arguing against the entailment thesis and for the superiority of belief were Colin Radford's and Bernard Williams'. Today Blake Myers-Schulz and Eric Schwitzgebel as well as Dylan Murray, Justin Sytsma and Jonathan Livengood provide convincing arguments disputing the rightfulness of the entailment thesis. In what follows I will discuss different accounts of knowledge and belief and point out the overlooked connection between these accounts and argue that it supports yet another line of argument against the entailment thesis. I will further argue that knowledge and belief are two separate concepts, neither of which can be defined in terms of the other, and that it is a belief that is more complex and requires further conditions than knowledge, most of all agent's actions.

Correspondence: [papers@team.qeios.com](mailto:papers@team.qeios.com) — Qeios will forward to the authors

## Cases against the entailment thesis

The JTB view, that knowledge is justified true belief, is very generally accepted, however, by no means standard or traditional. As Antognazza<sup>[1]</sup> points out, already ancient philosophers knew better than to conflate these two distinctly separate concepts. Plato<sup>[2]</sup>, Socrates and Aristotle<sup>[3]</sup> as well as Thomas Aquinas<sup>[4]</sup> and Kant<sup>[5]</sup> held that knowledge and belief are two separate and completely different notions. "According to these traditional views, knowing and believing are distinct in kind, in the strong sense that they are mutually exclusive mental states: the same cognitive subject cannot, simultaneously and in the same respect, be in the state of both knowing and believing the same thing. Knowing is not 'the best kind of believing'; nor is believing to be understood derivatively from knowledge"<sup>[1]</sup>. Furthermore, Antognazza argues that it was by mistake that today's common view of knowledge as justified true belief was ascribed to Plato. Nevertheless, "let it be taken for granted that an

innocent historical mistake was made in attributing the JTB analysis to Plato, and that equally innocently, this mistake mushroomed into the orthodox view for generations of epistemology students."<sup>[1]</sup> Needless to say, the mistake was in no way innocent. In fact, I believe that most of today's epistemological debates on knowledge and belief would not have even taken place if the two concepts were considered to be independent of each other.

There have been a few philosophers arguing against the entailment thesis and for the superiority of belief over knowledge. Inspired by Radford's example<sup>[6]</sup> of the unconfident examinee Jean, who in spite of not believing that he knows or remembers any English history answers all the quiz questions correctly, Myers-Schulz and Schwitzgebel present similar examples of knowledge without belief. They describe their scenarios to the students at the University of Wisconsin at Madison asking if the agent had knowledge, or alternatively belief in a given situation. The first scenario is the unconfident examinee modified from Radford. Kate has studied many hours for her history exam. She is sitting in the class taking the exam right now and everything is going quite well. She is about to answer the last question when the teacher announces that the exam will be over in 1 minute. Kate gets nervous and writes down the final answer not being sure whether it is correct, even though she learned it and even recited it to a friend a few hours earlier. The answer she has written is correct, but did Kate know/believe it? The second scenario is the absent-minded driver -- Ben who receives an email informing him that a bridge on his daily route to work will be closed tomorrow. He gets annoyed because he will have to take a longer way. The next day he leaves the house in plenty of time to make the drive, however, he decides to listen to the radio and gets so involved with the music that he absentmindedly continues on his regular route. The question is whether Ben knows/believes that the bridge is closed. The third scenario is perhaps, the most controversial since it involves an ethically problematic situation which may bias the responses. It regards a university professor -- Juliet who has a prejudice against her athlete students and does not consider them as capable as their non-athlete colleagues. Her prejudice is reflected in her treatment of the students, at the same time she repudiates all forms of prejudice and openly affirms that all her students are equally capable. Juliet even reviews her records only to find out that her athlete students actually performed better than the non-athlete ones, yet her prejudice remains. The question is whether Juliet knows/believes that her athlete students are as capable as the other ones?

The authors present two more scenarios with equally doubtful occurrences of knowledge or belief. Across the five scenarios, the results differed from each other in percentage but on average 77% of asked students attributed knowledge and 41% belief to the agents. These results support the claim that it is possible to have knowledge without having the corresponding belief, hence the entailment thesis does not hold. Furthermore, they argue that belief is something more than knowledge because it requires consistency on the agent's side. "It's as though knowledge requires only having the information stored somewhere and available to be deployed to guide action, while belief requires some consistency in deploying the information (at least dispositionally or counterfactually)" (2013, 380.) Myers-Schulz and Schwitzgebel<sup>[7]</sup> argue that their examples are cases with knowledge-sufficient capacities while it is not clear whether they also have belief-sufficient tendencies. These examples show that belief is a more complex notion. Fewer students attribute belief than knowledge in different scenarios allowing for the conclusion that belief requires additional conditions, namely consistency in our thoughts and actions. These investigations undermine the

default status of the entailment thesis and justify the claim for argumentation by its supporters.

Different arguments against the entailment thesis are presented by Dylan Murray, Justin Sytsma and Jonathan Livengood in their paper "God knows (but does God believe?)"<sup>[8]</sup>. They take yet another approach and present the conviction account. They also introduce four new case studies asking each participant both whether the agents in the scenarios know a certain proposition and whether they believe it. Their results show that "a non-trivial minority of English-speaking non-philosophers ascribe knowledge but not belief to an agent. Indeed, in our fourth study, there are more people who answer that an agent believes but does not know than who give any other combination of knows and believes answers". These results support their doubts about the default status of the entailment thesis. They are not entirely consistent with the earlier results since in the fourth study more people ascribe belief but not knowledge to the agent. Nevertheless, these results also weaken the default status of the entailment thesis since they show that knowledge and belief can occur independently from each other. Since it is possible to have one but not the other it follows that it is possible to acquire and later ascribe the concepts separately from each other. Hence, knowledge doesn't entail belief. According to their conviction account, it is not enough to have the information in order to form a belief. "Rather, one must also have the right sort of *attitude* toward that information--namely, one must mentally assent to it.". They define the assent conditions as follows "Call the *assent condition* on a type of propositional attitude the requirement that, to have such an attitude with proposition *p* as its content, one must either (i) currently mentally assent to *p*, (ii) have mentally assented to *p* in the past and not (yet) have disavowed *p*, or (iii) be currently disposed to assent to *p*." (ibid). It is essential to notice that this account addresses both dispositional and occurrent beliefs. Specifically, clause (i) is a condition on occurrent belief, while clauses (ii) and (iii) are conditions on a dispositional belief. Any theory requiring an assent on belief but not on knowledge is some kind of conviction account. But how to understand the assent condition? What distinguishes belief from different mental attitudes like suppositions, hopes, wishes could be "a subjective feeling of conviction in a proposition's truth". I believe that the assent condition requires something more than just a nod of the head. "A subjective feeling of conviction in a proposition's truth" sounds very much like Ramsey's interpretation of Bayesian theory dealing with subjective probabilities. Ramsey understood belief as leading a rational agent to the best possible action (satisfying her desires). Assenting to a belief and ascribing truth to it would simply mean, for Ramsey, being prepared to act on this belief<sup>[9]</sup>.

The results both these accounts arrive at indicate that the entailment thesis does not deserve the default status it enjoys. The capacity-tendency account as well as the conviction account offer interesting alternatives to the entailment thesis. I believe, however, that a purely analytical argumentation against the entailment thesis is needed and possible. Before we get there, however, there's another account that needs to be mentioned.

Bernard Williams in his "Deciding to believe"<sup>[10]</sup> holds that the entailment thesis expresses "a deep prejudice in philosophy"<sup>[10]</sup> and that in fact knowledge is an impoverished belief. Perhaps, the most important feature of belief for Williams is that it aims at truth. "To believe that so and so is one and the same as to believe that that thing is true."<sup>[10]</sup> Furthermore, "although the most straightforward, simple, and elementary expression of a belief by a language using creature is an

assertion, the assertion of  $p$  is neither a necessary nor, and this is the point I want to emphasise, a sufficient condition of having the belief that  $p$ .<sup>[10]</sup> It is not a necessary condition, simply because I may have beliefs which I do not express. It is not sufficient, because I may claim that I believe  $p$  without it truly being the case, i.e., my assertion that  $p$  can be insincere. This feature, according to Williams, is what makes belief superior to knowledge. Williams presents an idea of a machine producing so-called  $B$ -states. Keeping in mind that belief aims at truth, is expressed in an assertion, and that factual beliefs can be based on evidence the machine would produce true assertions, or rather messages. It would arrive at these messages making an inference based on evidence. In this way, it would produce what Williams calls  $B$  – states, which are much-impooverished versions of our beliefs. The essential reason for this is that the machine would be incapable of making insincere assertions. This, we humans, have much fewer problems doing. It is our decision; we act from our will to withhold our true belief or to lie. The machine cannot do it. It takes the direct route from the gathered information through the preprogrammed aim at truth and produces a true assertion, a  $B$  – state. If the machine would print out a false message it would be due to a malfunction, not due to its intention to do it. The key component is free will. Humans can choose whether to make a true assertion about our belief or whether to withhold the truth. Concluding "It is, however, a notable feature of this machine that it could produce true  $B$  – states which were non-accidentally arrived at, that is which were not randomly turned out but were the product of the environment, the programming and so on; and these might be called 'knowledge'."<sup>[10]</sup> In this sense, we could say that this machine knows the train and bus schedules as well as the city's street plan and even where it is itself. In this usage of 'knows' it would mean 'has the information'. Therefore, knowledge consists barely in having the information, while belief involves our will to express or withhold it. As much as I agree with Williams' interpretation of knowledge as simply having the information, I believe there is much more to belief than our will to express or withhold it.

Buckwalter, Rose and Turri<sup>[11]</sup> defend the entailment thesis by distinguishing between *thin belief* and *thick belief*. While thin belief is merely a cognitive pro-attitude recognizing the truth of  $P$  not requiring you to like it, not emotionally endorsing it or assenting to it, thick belief is the whole package involving emotions which, in addition to having the information that  $P$  is true, 'thicken' your belief that  $P$  is true into you liking it that it is so, emotionally endorsing it or assenting to it. They argue that "the entailment thesis should be understood in terms of *thin belief*, whereas the experimental results in question should be understood in terms of *thick belief*". This leads them to the conclusion that "when understood properly, the entailment thesis is as firmly rooted as the *factivity thesis* in our ordinary ways of thinking and speaking about knowledge." (ibid). They weaken the entailment thesis by holding that knowledge entails 'merely' thin belief. As the authors admit themselves their characterisation of thick belief resembles the conviction account. They go even further and state that knowledge is a form of thin belief. The authors claim that thick belief requires me to endorse the proposition believed, liking it. If it really is so, then it supports the claim that belief is a more complex notion than knowledge. Then knowledge cannot entail belief. Knowledge is *factive*, even if knowledge entails thin belief, if we accept such distinction, it doesn't entail the thick one because it is more complex, it requires so much more than knowledge. It is a desperate, however, as I argue later, vain attempt to salvage the entailment thesis.

## On knowledge vs. belief

The reason why I am listing all these philosophers and sketching their views is to reinforce doubt about the rightfulness of the entailment thesis. There may be more theories accepting the entailment thesis than rejecting it, but that does not mean that it is correct. Only recently more philosophers have started questioning the alleged intuitions behind the entailment thesis, even though it had no place in the ancient and medieval philosophy. The number and diversity of theories defining knowledge in terms of belief suggest that another approach may be necessary. Philosophers have had a hard time agreeing on a satisfying account of the relationship between knowledge and belief. They all focus on different aspects of the concepts and point towards the weaknesses of one of them. I believe the reason for this is that they assume that knowledge and belief somehow belong together, and one can be explained in terms of the other. But what if knowledge and belief were understood as two completely separate notions? If we follow Thomas Aquinas, we agree that it is impossible to know a proposition and believe it at the same time because the two concepts are mutually exclusive. Either I know something, or I don't. I can believe a proposition but then I cannot know it at the same, it's either or. For Thomas knowledge comes from perception, but I think it is safe to say that it could also come from memory or induction. If I see or remember something being the case, I know it (ignoring the cases when our memory or perception can deceive us, for the present). If I don't see or remember it, I cannot know it, but I can believe it. In knowledge, therefore, there has to be a direct contact between the known object, which is either seen or remembered and the subject who knows or remembers it. It applies equally to mathematical and logical proofs which when done correctly can be read or traced back and so become known to whoever does or reads them. Hence, Aquinas' interpretation, although for different reasons, attributes additional powers to belief over knowledge. It's easy to know, to believe requires something more. If we interpret knowledge and belief as separate and mutually exclusive notions, the entailment thesis controversy ceases to exist.

Also Cook Wilson, an influential representative of the Oxford realism school, holds that these two notions are distinct. On his account knowledge and belief are two independent and completely different mental states. Moreover, if we have one of these mental states, about a certain proposition, we cannot have the other. "Belief is not knowledge, and the man who knows does not believe at all what he knows, he knows it"<sup>[12]</sup>.

Cook Wilson criticizes the view which he calls "obscurely bound up with the familiar distinction of judgement from inference, the view namely, that knowledge, opinion, belief, as well as perception and experience, are forms of one and the same sort of mental activity, called judgement."<sup>[12]</sup> Hence, not only belief and knowledge are distinct concepts. Perception and experience also should be distinguished since they do not involve thinking properly. What is important for Cook Wilson is that we arrive at different mental states through distinct processes. For example, what distinguishes judgement from knowledge is the agent's decision. There is no decision involved in knowledge. We do not decide to have knowledge as we do when we decide to judge or believe something. "A judgement is a decision. To judge is to decide. It implies previous indecision; a previous thinking process, in which we are doubting. Those verbal statements, therefore, which result from a state of mind not preceded by such doubt, statements which are not decisions, are not judgements, though they may have the same verbal form as judgements"<sup>[12]</sup>. The way he uses the concept of

"judgement" here it could also be a belief. Hence, I think rather that to believe is to decide. To believe is to think, to know does not actively involve thinking or deciding. It is stating a fact it does not involve a process of intellectual activity, it is only stating that such and such is the case.

There certainly is a connection between knowledge and belief, even if they are different concepts. We both know and believe things. There are no feelings or emotions when it comes to knowledge, it is factive. Things are true whether I like it or not, whether I know it or not. It may seem that action is the one thing knowledge and belief have in common, since we all act on our knowledge as well as on our beliefs. I believe, however, that our actions differ depending on whether we act on beliefs or on knowledge.

For instance, I have a dispositional belief (or perhaps I should rather say knowledge) that the Cambridge Union is in Bridge Street; but this belief is very rarely manifested in an act of thought: I do not often have occasion to judge that that is where the Union is: I only do this when I have to inform a stranger, or just now when I thought of it for an example. On the other hand, this belief of mine is frequently manifested by my turning my steps that way when I want a book from the Union Library, which I do without any process of thought which could properly be called thinking that the Union is in Bridge Street. In Oxford, I should have to think where the Union was, but in Cambridge, where I am at home, I go there habitually without having to think.<sup>[13]</sup>

This I think is the major difference between acting on a current belief and on knowledge. When I know something for a fact, I do not have to think about it, I can just act habitually. When, on the other hand, I'm now forming a belief when I look out the window, see the dark clouds and think that it will rain soon, then based on this belief, I decide to take an umbrella before I leave the house. We act more consciously on our current beliefs than we do on our knowledge. A present belief requires more involvement on the agent's side. Whether we call it assent or a subjective feeling of conviction it means that we are fully aware of our belief as we act on it and we act because of it. That's why belief is the more complex concept requiring further conditions: mental assent, feeling of conviction, full awareness or consciousness. That's why believing something requires more than simply knowing it.

We don't, however, act only on our knowledge and on our full beliefs, we also act on our partial beliefs, which are in fact the predominant kind we have. Thankfully, Frank Ramsey equipped us with a perfect tool to make rational decisions when acting on partial beliefs -- his theory of probability presented in "Truth and Probability"<sup>[14]</sup>. He connects belief strictly to actions and holds that "the degree of a belief is a causal property of it, which we can express vaguely as the extent to which we are prepared to act on it."<sup>[14]</sup> Ramsey discussed full belief in his other ground-breaking paper "Facts and Propositions"<sup>[15]</sup> where he defines beliefs as "any set of actions for whose utility  $p$  is a necessary and sufficient condition might be called a belief that  $p$ , and so would be true if  $p$ , i.e., if they were useful<sup>[15]</sup>." For Ramsey, it is clear that our beliefs are strictly connected to our actions. We want our beliefs to guide our actions and so to fulfil our desires. Ramsey knew, however, that an everyday situation is complicated since more than one belief moves an agent to action which is often also complex, that's why he calls a belief "a set of actions" and developed his theory of

decision-making accordingly. Ramsey argued for the strong connection between beliefs and action: "we shall however find it impossible to give any satisfactory account of belief or even of thought without making any reference to possible resulting actions"<sup>[13]</sup>. Hence, our actions make all the difference.<sup>2</sup>

Since belief requires the agent's assent and knowledge doesn't (Murray), it should be seen as a more complex concept than knowledge. Assent should be interpreted as action. If I am prepared to mentally assent to a belief, I am prepared to act on it. Hence, belief requires action while knowledge does not. Believing is often understood as thinking, and the act of thinking is clearly an action. The capacity-tendency theory, as well as conviction, account both assume that knowledge and belief are very different from each other. When knowledge is interpreted as a capacity verb and belief as a tendency verb it also supports the claim that knowledge is passive, and belief requires action. Knowledge is a state, it is factive and requires no action. We can have knowledge that we never act on. A belief, on the other hand, is a belief only if we act on it at some point. Also for Joseph Margolis belief involves action "knowledge involves one's capacity to provide the right information in the right way while belief involves the likelihood that one would perform appropriately if one were asked to"<sup>[16]</sup>. Even Timothy Williamson whose aim in *Knowledge and its Limits* is to establish knowledge as the most general factive mental state connects beliefs strictly with actions "to believe something is, roughly, to act as though one knew it; a successful belief is knowledge".

Bernard Williams argues that knowledge is an impoverished belief. For him it is the free will that distinguishes belief from knowledge, that makes it something more. Myers-Schulz and Schwitzgebel advocate the capacity-tendency account on which knowledge requires barely some information stored in our minds while belief requires consistency in one's behaviour. Murray et al. propound the conviction account on which belief, but not knowledge, requires the mental assent of the agent. It is not enough to have the necessary information in our mind (knowledge), additionally, one has to have the right kind of attitude towards that information -- one must mentally assent to it. On these accounts, belief is more complex than knowledge for it requires free will, consistency or mental assent. All these requirements have to do with acting on our beliefs. Williamson<sup>[17]</sup>, on the other hand, claims the primacy of knowledge over belief and argues that knowledge is so much more than belief because it's prime and factive. Even though he considers belief to be a purely mental state (as opposed to factive knowledge) he admits that to believe something is to act as if one knew it. In all these accounts belief is connected to action. To have a belief means to be willing to act on it as if it were true. Since all parties discussing knowledge and belief, no matter their standpoint, consider action to be central in one context or another, it is definitely worth more focus and deliberation. It seems to play a central role in all the accounts even if it has not been spelled out as such. Frank Ramsey is the one philosopher who does spell it out.

This is a kind of pragmatism: we judge mental habits by whether they work, i.e. whether the opinions they lead to are for the most part true, or more often true than those which alternative habits would lead to.<sup>[14]</sup>

Our mental habits, according to Ramsey, involve perception, memory, and induction. We use these habits to form opinions and "given a habit of a certain form, we can praise or blame it accordingly as the degree of belief it produces is

near or far from the actual proportion in which the habit leads to truth"<sup>[14]</sup>. Hence, habits producing our beliefs have to 'work', which means that "the opinions they lead to are for the most part true, or more often true than those which alternative habits would lead to"<sup>[14]</sup> -- this we can only determine by acting on our beliefs. We choose to act on those beliefs to which we ascribe a higher degree of probability compared to the alternative ones. Since we also base our actions on our subjective full beliefs, they fit into the theory of rational decision-making just the same as partial beliefs since they are all subjective. We choose which beliefs to act upon according to the principle of maximizing expected utility. In that way we make our beliefs work.<sup>3</sup>

The analysis of the discussed accounts allows for the conclusion that the default status of the entailment thesis is in no way justified. Not only empirical arguments based on studies with non-philosophers can support the anti-entailment thesis debate. It is essential to recognize that knowledge and belief are diametrically opposed and mutually exclusive. Either I know something, or I believe it. I cannot believe something which I already know. If we accept this distinction all discussions about the entailment thesis become obsolete. Theoretical philosophical arguments presented in Ramsey's works emphasize the central role agent's actions play in our understanding of beliefs. Several presented accounts hold that believing something means acting on this belief as if it were true. Only the belief I'm assenting to currently is the belief on which I act. Since belief requires action, while knowledge does not, belief should be considered the more complex notion.

## Statements and Declarations

### Author Contributions

The sole author conceived the study, conducted the research, and wrote the manuscript.

## Footnotes

<sup>1</sup> See e.g. Schwitzgebel<sup>[18]</sup>

<sup>2</sup> For the sake of clarity it is necessary to point out that Ramsey considered knowledge to be true, well-grounded or obtained by a reliable process belief. This is an interpretation he took up from Russell. At the same time, his whole philosophy revolves around the concept of belief, both partial and full. His goal was to develop a theory of belief which did not presuppose the concept of truth. He was not interested in a theory of knowledge.

<sup>3</sup> For a thorough discussion on this see Sahlin<sup>[19]</sup>.

## References

1. <sup>a</sup> <sup>b</sup> <sup>c</sup>Antognazza MR (2020). "The distinction in kind between knowledge and belief." *Meeting of the Aristotelian Society*. CXX(3). doi:10.1093/arisoc/aqaa013.
2. <sup>Δ</sup>Plato (1921). *Theaetetus. Sophist*. Translated by Harold North Fowler. Loeb Classical Library 123. Cambridge, MA: Harvard University Press.
3. <sup>Δ</sup>Aristotle (2016). *De Anima*. Translated by Christopher Shields. Oxford: Clarendon Press.



4. <sup>△</sup>Thomas Aquinas (1886–1887). *Summa Theologiae. Textum Leoninum*. Rome: Ex Typographia Senatus.
5. <sup>△</sup>Kant I (1900–). *Kant's Gesammelte Schriften*. 29 vols. Edited by Königlich Preussische, later Deutsche, then Berlin-Brandenburg Akademie der Wissenschaften. Berlin: Georg Reimer, then Walter de Gruyter.
6. <sup>△</sup>Radford C (1966). "Knowledge: By examples." *Analysis*. 27(1):1–11.
7. <sup>△</sup>Myers-Schulz B, Schwitzgebel E (2013). "Knowing that P without believing that P." *Nous*. 47(2):371–384.
8. <sup>△</sup>Murray D, Sytsma J, Livengood J (2012). "God knows (but does God believe?)." Springer Science+Business Media B.V.
9. <sup>△</sup>Ramsey FP (1929). "Knowledge." In: Mellor DH, editor. *F.P. Ramsey. Philosophical Papers*. Cambridge: Cambridge University Press; 1990. pp.110–111.
10. <sup>△</sup><sub>a</sub>, <sup>△</sup><sub>b</sub>, <sup>△</sup><sub>c</sub>, <sup>△</sup><sub>d</sub>, <sup>△</sup><sub>e</sub>Williams B (1973). "Deciding to believe." In: *Problems of the Self: Philosophical Papers 1956–1972*. Cambridge: Cambridge University Press.
11. <sup>△</sup>Buckwalter W, Rose D, Turri J (2015). "Belief through thick and thin." *Nous*. 49(4): 748–775.
12. <sup>△</sup><sub>a</sub>, <sup>△</sup><sub>b</sub>, <sup>△</sup><sub>c</sub>Cook Wilson J (1926). *Statement and Inference with other philosophical papers*. Oxford: Clarendon Press. <https://archive.org/details/statementinference0000wilson/pa>.
13. <sup>△</sup><sub>a</sub>, <sup>△</sup><sub>b</sub>Ramsey FP (1991). *On Truth*. Rescher N, Majer U, editors. Dordrecht, The Netherlands: Kluwer Academic Publishers.
14. <sup>△</sup><sub>a</sub>, <sup>△</sup><sub>b</sub>, <sup>△</sup><sub>c</sub>, <sup>△</sup><sub>d</sub>, <sup>△</sup><sub>e</sub>Ramsey FP (1926). "Truth and Probability." In: Mellor DH, editor. *F.P. Ramsey. Philosophical Papers*. Cambridge: Cambridge University Press; 1990. pp. 53–109.
15. <sup>△</sup><sub>a</sub>, <sup>△</sup><sub>b</sub>Ramsey FP (1927). "Facts and Propositions." In: Mellor DH, editor. *Philosophical Papers*. Cambridge: Cambridge University Press; 1990. pp. 34–51.
16. <sup>△</sup>Margolis J (1973). *Knowledge and existence*. New York: OUP.
17. <sup>△</sup>Williamson T (2003). *Knowledge and its Limits*. Oxford: OUP.
18. <sup>△</sup>Schwitzgebel E (2019). "Belief." In: Zalta EN, editor. *The Stanford Encyclopedia of Philosophy* (Fall 2019 edition). <https://plato.stanford.edu/archives/fall2019/entries/belief/>.
19. <sup>△</sup>Sahlin N-E (1990). *The Philosophy of F.P. Ramsey*. Cambridge, MA: Cambridge University Press.

## Declarations

**Funding:** FWF Austrian Research Fund

**Potential competing interests:** No potential competing interests to declare.