

The background of the entire page is Raphael's famous fresco 'The School of Athens'. It depicts a group of ancient Greek philosophers in a grand, vaulted architectural setting. The figures are engaged in various activities of study and teaching, such as Plato pointing upwards and Aristotle gesturing downwards. The architecture features a series of arches and classical columns, creating a sense of depth and grandeur. The title text is overlaid on the upper portion of the fresco.

Bridging Epistemic Traditions: A Syncretic Approach to Knowledge and Belief Formation

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Introduction

This essay presents a syncretic epistemological framework that integrates coherentism, reliabilism, and transcendental idealism to provide a robust and flexible approach to belief formation. Drawing on insights from philosophy, neuroscience, and psychology, the framework combines various belief formation strategies, such as thought-experiments, Bayesian inference, falsification, and hypothesis generation, to help individuals navigate complex cognitive challenges and develop well-justified beliefs.

The essay and its addendums delve into the implications and applications of the proposed framework, highlighting its positive psychological impacts, including intellectual humility, cognitive flexibility, enhanced self-awareness, and resilience in the face of uncertainty. The essay explores the framework's flexibility and modularity, enabling the adoption and swapping of belief formation strategies depending on the context, and presents additional strategies such as counterfactual reasoning, internal debates, and playing devil's advocate.

Addendums provide in-depth analyses of use cases, such as everyday Gettier cases and out-of-context conjectures like solipsism and the simulation hypothesis, demonstrating the framework's applicability in various contexts. Moreover, recent findings from neuroscience research are discussed, offering empirical support for the framework and its belief formation strategies. The essay also examines the reliability of sensory perception, considering qualia and subjective experiences across sensory modalities, and discusses methods for appraising the reliability of perception within the syncretic framework.

Integrating Coherentism, Reliabilism, and Kant's Transcendental Idealism

The pursuit of knowledge has been a central concern of philosophers for millennia, with various epistemological theories emerging to elucidate the nature of knowledge and belief formation. In this essay, I propose a syncretic epistemological approach that combines the insights of coherentism, reliabilism, and Kant's transcendental idealism to provide a robust framework for understanding and cultivating justified beliefs.

Coherentism, originating from thinkers like Quine and Neurath, posits that a belief is justified if it is part of a coherent system of beliefs. A coherent system is characterized by logical consistency, explanatory comprehensiveness, and mutual support among its constituent beliefs (Quine & Ullian, 1970). The concept of coherentism suggests that beliefs can be assessed not in isolation, but rather in relation to the other beliefs within an individual's cognitive repertoire.

Reliabilism, on the other hand, emphasizes the importance of the processes that generate beliefs, asserting that a belief is justified if it is produced by a reliable cognitive process (Goldman, 1979). According to the reliabilist perspective, reliable cognitive capacities are integral to the formation of justified beliefs. This approach shifts the focus from the coherence of a system of beliefs to the reliability of the cognitive mechanisms that produce them.

Transcendental idealism offers another perspective on epistemology by emphasizing the role of the human mind in shaping our experience of reality. According to Kant, we can only know the world as it appears to us, filtered through the structure of our own cognitive faculties (Kant, 1781). This view maintains that our understanding of the world is constrained by the categories and forms of intuition that shape our perceptions and thoughts.

I propose that a robust epistemological framework can be developed by integrating the insights of coherentism, reliabilism, and transcendental idealism. This syncretic approach acknowledges the importance of coherent belief systems while also emphasizing the role of reliable cognitive processes in belief formation. Moreover, it incorporates the insights of Kant's transcendental idealism to recognize the limitations and the active role of the human mind in constructing our experience of reality.

By combining these perspectives, we can develop a more comprehensive understanding of knowledge and belief formation. Coherentism reminds us of the importance of maintaining a logically consistent and mutually supportive network of beliefs. Reliabilism highlights the need for reliable cognitive processes to generate justified beliefs. And Kant's transcendental idealism underscores the active role of the human mind in shaping our experience of reality, as well as the inherent limitations that come with this constructive process.

In the next part of the essay, I will explore strategies for belief formation, including thought-experiments, Bayesian inference, falsification, and hypothesis generation. These strategies, when employed within the context of our syncretic epistemological framework, can contribute to the formation of robust, justified beliefs that account for both the limitations of human cognition and the interconnected nature of belief systems.

Strategies for Belief Formation in Light of Neuroscience

In this section, I will explore strategies for belief formation that align with our syncretic epistemological framework. I will discuss thought-experiments, Bayesian inference, falsification, and hypothesis generation, and refer to insights from neuroscience research to support the use of these concepts and strategies.

Thought experiments are a crucial tool for belief formation. They involve mentally simulating a scenario or situation to explore the implications of certain assumptions, principles, or theories. This strategy is particularly valuable in philosophy, as it allows us to test our beliefs and intuitions in hypothetical contexts. Neuroscience research has demonstrated that thought-experiments rely on our ability to engage in mental simulation, which involves the recruitment of neural networks associated with episodic memory, mental imagery, and perspective-taking (Hassabis & Maguire, 2007). These neural processes provide a reliable cognitive basis for the use of thought-experiments in belief formation.

Bayesian inference is another strategy for belief formation that is grounded in the principles of probability theory. This approach involves updating our beliefs based on new evidence, with the degree of belief revision determined by the likelihood of the evidence given the initial belief (Bayes, 1763). Neuroscience research has revealed that the human brain is capable of performing Bayesian inference in various contexts, such as perception, decision-making, and learning (Knill & Pouget,

2004). This suggests that our cognitive capacities are, to some extent, inherently suited for Bayesian reasoning, supporting its inclusion in my epistemological framework.

Falsification, a concept introduced by philosopher Karl Popper, is an essential strategy for belief formation in scientific contexts. It involves the process of testing hypotheses by attempting to disprove them, with the goal of refining or replacing them with more accurate explanations (Popper, 1959). Neuroscience research supports the idea that the human brain is naturally inclined towards hypothesis generation and testing. For example, the brain's ability to generate and evaluate multiple possible explanations for observed data has been linked to the activity of the prefrontal cortex (Badre et al., 2005). This neural evidence bolsters the importance of falsification in my epistemological framework.

Lastly, hypothesis generation is an indispensable aspect of belief formation. It involves the formulation of testable, falsifiable hypotheses that can be used to guide our investigations and inferences about the world. Neuroscience research has demonstrated that the human brain is capable of generating novel hypotheses by engaging in creative problem-solving, which relies on the interaction of multiple neural networks, including those involved in cognitive control, memory, and attention (Beatty et al., 2016). This capacity for hypothesis generation lends further support to the inclusion of falsification and Bayesian inference in my syncretic epistemological approach.

In summary, the strategies for belief formation discussed in this part—thought-experiments, Bayesian inference, falsification, and hypothesis generation—can be integrated into my syncretic epistemological framework, which combines coherentism, reliabilism, and transcendental idealism. Neuroscience research provides empirical support for the use of these strategies, demonstrating their alignment with the brain's cognitive capacities and their potential to contribute to the formation of robust, justified beliefs.

Discussion

Implications of the Syncretic Epistemological Framework

The proposed syncretic epistemological framework carries several implications for our understanding of knowledge and belief formation. By combining the insights of these three theories, we achieve a more comprehensive and nuanced perspective on epistemology that acknowledges the interconnected nature of belief systems, the importance of reliable cognitive processes, and the active role of human cognition in constructing our experience of reality.

One major implication of this framework is that it encourages a holistic approach to evaluating and cultivating justified beliefs. By emphasizing the coherence of belief systems and the reliability of cognitive processes, this approach encourages us to critically assess both the content of our beliefs and the methods by which they are formed. This self-reflective stance can contribute to a more thorough and careful examination of our beliefs, reducing the likelihood of accepting unfounded or poorly justified ideas.

Another implication is the recognition of the inherent limitations of human cognition. Kant's transcendental idealism highlights the fact that our understanding of reality is shaped and constrained by our cognitive faculties. This insight can foster a sense of intellectual humility and open-mindedness, as it reminds us that our beliefs are always subject to the limitations of our own

perspective. By acknowledging these limitations, we can become more receptive to perspectives that may challenge our current beliefs and help us refine our understanding of the world.

Lastly, the syncretic epistemological framework has practical implications for the development and application of belief formation strategies. By incorporating thought-experiments, Bayesian inference, falsification, and hypothesis generation, the framework offers a diverse set of tools for evaluating and refining our beliefs. These strategies can be employed in various contexts, from scientific inquiry to moral deliberation, helping us navigate the complexities of human knowledge and decision-making.

Conclusion

Adopting the Syncretic Framework for Belief Formation

Considering the discussion, there are several compelling reasons to adopt the proposed syncretic epistemological framework for belief formation in our own lives. First, the framework provides a comprehensive and nuanced understanding of knowledge and belief, incorporating the strengths of coherentism, reliabilism, and transcendental idealism. This multifaceted perspective can contribute to a more robust and accurate understanding of the world around us.

Second, the framework encourages intellectual humility and open-mindedness by recognizing the limitations of human cognition and the active role of our cognitive faculties in constructing our experience of reality. This recognition can foster a more receptive and adaptive mindset that is open to considering novel perspectives and revising our beliefs in light of new evidence.

Finally, the syncretic framework offers a diverse set of strategies for belief formation, including thought-experiments, Bayesian inference, falsification, and hypothesis generation. These strategies, supported by insights from neuroscience research, provide practical tools for evaluating and refining our beliefs in various contexts. By adopting this framework, we can cultivate a more thorough, self-reflective, and adaptive approach to belief formation, ultimately leading to a more nuanced and accurate understanding of the world and our place within it.

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Addendum 1

Flexibility and Modularity of the Syncretic Epistemological Framework

The syncretic epistemological framework proposed in this essay not only integrates coherentism, reliabilism, and transcendental idealism but also offers flexibility and modularity, allowing it to adapt to different contexts and requirements of the belief formation process. As a flexible and modular framework, it can adopt and swap strategies when the context calls for it, ensuring that our approach to belief formation remains relevant and effective.

Counterfactual Reasoning

This strategy involves imagining alternative scenarios or outcomes and evaluating their implications for our beliefs. By considering what might have happened under different circumstances, we can gain a deeper understanding of the causal relationships and principles underlying our beliefs, leading to more refined and accurate knowledge.

Internal Debates

Engaging in internal debates allows us to critically evaluate our beliefs by exploring different perspectives and arguments. By consciously considering and weighing the merits of various viewpoints, we can identify potential weaknesses in our beliefs and refine our understanding accordingly.

Playing Devil's Advocate

This strategy involves actively challenging our own beliefs by adopting an opposing viewpoint and trying to find arguments against our current position. This can help us uncover potential blind spots in our reasoning and better appreciate the strengths and weaknesses of our beliefs.

Analogical Reasoning

This strategy involves identifying similarities between seemingly unrelated concepts or situations, allowing us to draw inferences and generate new insights based on these analogies. By leveraging the power of analogy, we can expand our understanding of complex issues and discover novel connections between ideas.

Collaborative Belief Formation

Engaging in open discussions and collaborative inquiry with others can help us refine our beliefs and expose us to new perspectives. By sharing our ideas and receiving feedback from others, we can

benefit from the collective wisdom and expertise of the group, resulting in more robust and well-justified beliefs.

These additional strategies, along with those previously discussed in the essay, demonstrate the flexibility and modularity of the syncretic epistemological framework. By adapting to the requirements of the context and incorporating a diverse set of belief formation strategies, this framework offers a versatile and effective approach to the pursuit of knowledge and understanding.

Addendum 2

Positive Psychological Impacts of the Syncretic Epistemological Framework

The syncretic epistemological framework proposed in this essay offers not only a comprehensive approach to belief formation but also yields positive psychological impacts for individuals who adopt it. These impacts include intellectual humility, cognitive flexibility, enhanced self-awareness, and resilience in the face of uncertainty.

Intellectual Humility

Recognizing the limitations of human cognition and the active role of our cognitive faculties in constructing our experience of reality fosters intellectual humility. This humility can lead to more open-mindedness and a willingness to consider novel perspectives or revise our beliefs considering new evidence, contributing to a more nuanced understanding of the world.

Cognitive Flexibility

The flexibility and modularity of the framework, which allows for the adoption and swapping of various belief formation strategies, encourages cognitive flexibility. This flexibility enables individuals to adapt their thinking and problem-solving approaches to different contexts, leading to more effective decision-making and learning.

Enhanced Self-Awareness

By encouraging critical evaluation of both the content of our beliefs and the methods by which they are formed, the syncretic framework promotes self-awareness. This self-reflective stance can help individuals identify potential biases, blind spots, or inconsistencies in their thinking, allowing them to refine their beliefs and develop a more accurate understanding of the world.

Resilience in the Face of Uncertainty

The framework's emphasis on the coherence of belief systems and the reliability of cognitive processes can contribute to resilience in the face of uncertainty. By cultivating a robust and interconnected network of beliefs, as well as honing reliable cognitive processes, individuals can build a stable foundation for decision-making and problem-solving, even when faced with complex or ambiguous situations.

In summary, the adoption of the syncretic epistemological framework offers various positive psychological impacts, including intellectual humility, cognitive flexibility, enhanced self-awareness, and resilience in the face of uncertainty. These benefits can contribute to personal growth, more effective decision-making, and a deeper understanding of the world and our place within it.

Addendum 3

Analyzing Use Cases of the Syncretic Epistemological Framework

In this addendum, I will analyze two use cases in detail: a common everyday Gettier case and out-of-context conjectures, such as solipsism, Last Thursdayism, God, or the simulation hypothesis. The syncretic epistemological framework can provide valuable insights and tools to navigate these complex situations.

Use Case 1: Everyday Gettier Case

Gettier cases, introduced by Edmund Gettier (1963), challenge the traditional justified true belief (JTB) account of knowledge by presenting scenarios where individuals hold justified true beliefs that do not constitute knowledge due to the presence of luck. In an everyday Gettier case, imagine a person, Alice, who sees her colleague, Bob, wearing a red shirt at work. Later that day, Alice overhears a conversation that Bob will be promoted. Based on this information, Alice forms a belief that the person wearing a red shirt will be promoted. Unknown to Alice, Bob's promotion was canceled, but another colleague, Carol, who also happens to be wearing a red shirt, is promoted instead.

The syncretic epistemological framework can help address this Gettier case by examining the coherence of Alice's belief system, assessing the reliability of her cognitive processes, and considering the role of her cognitive faculties in constructing her experience of reality. By encouraging Alice to critically evaluate her beliefs and the methods by which they are formed, this framework can help her identify potential biases, inconsistencies, or inaccuracies in her thinking, ultimately leading to a more nuanced understanding of the situation.

Use Case 2: Out-of-Context Conjectures

Out-of-context conjectures, such as solipsism, Last Thursdayism, God, or the simulation hypothesis, present unique challenges for belief formation due to their abstract and speculative nature. These conjectures often involve claims that are difficult to verify or falsify, making it challenging to evaluate their truth or plausibility.

The syncretic epistemological framework can provide valuable guidance for approaching these conjectures by emphasizing the importance of coherent belief systems, reliable cognitive processes, and the role of human cognition in constructing our experience of reality. By applying strategies such as thought-experiments, Bayesian inference, internal debates, and playing devil's advocate, individuals can critically evaluate the plausibility and implications of these conjectures.

Moreover, Kant's transcendental idealism can offer valuable insights into the limitations of human cognition when considering out-of-context conjectures. By recognizing that our understanding of reality is shaped and constrained by our cognitive faculties, we can develop a sense of intellectual humility and open-mindedness that acknowledges the inherent limitations and uncertainties involved in contemplating these conjectures.

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Addendum 4

Neuroscience Findings Supporting the Syncretic Epistemological Framework

Recent findings from neuroscience research have provided valuable insights into the cognitive processes underlying belief formation, offering empirical support for the use of the syncretic epistemological framework. In this addendum, I will analyze three such findings and provide references to the relevant literature.

Hierarchical Cognitive Control and Coherence

Badre, Wagner, and D'Esposito (2005) found evidence for distributed hierarchical cognitive control in the human prefrontal cortex. This hierarchical organization allows for the integration of information across various levels of abstraction, facilitating the formation of coherent belief systems. This finding supports the importance of coherence in the syncretic epistemological framework, as it reveals the neural basis for organizing and integrating beliefs into a coherent whole.

Bayesian Brain and Reliability

Knill and Pouget (2004) proposed the Bayesian brain hypothesis, which suggests that the brain represents and processes information in a probabilistic manner consistent with Bayesian inference. This hypothesis has been supported by numerous experimental findings and provides a neural basis for the reliability of cognitive processes. The Bayesian brain hypothesis supports the use of Bayesian inference as a reliable belief formation strategy within the syncretic epistemological framework.

Constructive Episodic Simulation and Thought-Experiments

Hassabis and Maguire (2007) proposed the constructive episodic simulation hypothesis, which suggests that the human brain can flexibly recombine elements of past experiences to construct novel scenarios for future planning, problem-solving, and decision-making. This ability to generate and manipulate mental simulations is crucial for engaging in thought-experiments, a key strategy in the syncretic epistemological framework. The constructive episodic simulation hypothesis offers a neural basis for the use of thought-experiments in belief formation and evaluation.

These three recent findings from neuroscience research offer empirical support for the use of the syncretic epistemological framework in belief formation. By revealing the neural basis for coherence,

reliability, and thought experiments, these findings underscore the relevance and effectiveness of the proposed framework in facilitating a nuanced understanding of the world and our place within it.

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Addendum 5

Case Study on the Reliability of Sensory Perception

Sensory perception forms the foundation of our experiences and beliefs about the world. In this addendum, I will examine the reliability of sensory perception by considering qualia (subjective experiences) in all sensory modalities and as an integrated subjective experience. By analyzing the factors that influence the reliability of perception and the methods for appraising this reliability, we can better understand the role of sensory perception in the syncretic epistemological framework.

Variability and Limitations of Sensory Perception

Sensory perception is subject to variability and limitations due to several factors, including:

- a. **Biological differences:** Individuals may have different perceptual abilities due to genetic factors, age, or health conditions, which can lead to variability in sensory experiences.
- b. **Environmental influences:** External factors such as lighting, noise, and temperature can affect the quality and reliability of sensory perception.
- c. **Cognitive biases:** Our expectations, past experiences, and mental states can influence how we interpret and integrate sensory information, potentially leading to biased or inaccurate perceptions.

Appraising the Reliability of Sensory Perception

Appraising the reliability of sensory perception involves assessing the factors that contribute to the accuracy and consistency of our subjective experiences. Some methods for evaluating the reliability of sensory perception include:

- a. **Cross-modal validation:** Comparing and integrating information from multiple sensory modalities can help increase the reliability of perception. For example, using both visual and auditory information to estimate the distance of an object can lead to a more accurate perception than relying on a single modality.

- b. **Objective measurement:** Comparing subjective experiences with objective measurements, such as using scientific instruments to quantify perceptual stimuli, can help determine the accuracy and reliability of sensory perception.
- c. **Consistency over time and contexts:** Assessing the stability and consistency of sensory experiences across different situations and time points can provide insights into the reliability of perception. If a particular perceptual experience is consistently observed in similar contexts, it may be considered more reliable.
- d. **Consensus among individuals:** Comparing sensory experiences with those of other individuals can provide an additional source of information for appraising the reliability of perception. If a particular perceptual experience is shared by multiple individuals, it may be considered more reliable.

Sensory Perception in the Syncretic Epistemological Framework

The syncretic epistemological framework recognizes the importance of sensory perception as a source of knowledge while also acknowledging its potential limitations and biases. By incorporating strategies such as Bayesian inference, thought experiments, and internal debates, the framework encourages individuals to critically evaluate their sensory experiences and integrate them with other sources of information, leading to more reliable and well-justified beliefs.

In conclusion, the reliability of sensory perception is an essential consideration in the syncretic epistemological framework. By understanding the factors that influence the reliability of perception and employing methods for appraising this reliability, individuals can form more accurate and robust beliefs about the world based on their sensory experiences.

Addendum 6

Addressing Perceptual Illusions, Hallucinations, and Anomalies within the Syncretic Epistemological Framework

Perceptual illusions, hallucinations, and other anomalies pose significant challenges to the reliability of sensory perception and the formation of well-justified beliefs. In this addendum, I explore the implications of the syncretic epistemological framework for addressing these perceptual anomalies and discuss how the framework can help individuals navigate the complexities of these experiences. I provide references to relevant literature to support our discussion.

Perceptual Illusions

Perceptual illusions occur when the brain misinterprets sensory input, resulting in distorted or inaccurate perceptions. The syncretic framework can help address these illusions by encouraging individuals to:

- a. **Employ cross-modal validation:** By comparing and integrating information from multiple sensory modalities, individuals can detect inconsistencies and resolve ambiguous perceptual experiences (Shams & Beierholm, 2010).
- b. **Engage in internal debates:** Considering alternative interpretations of sensory input and playing devil's advocate can help individuals identify potential biases and avoid falling prey to perceptual illusions (Balcetis & Dunning, 2010).

Hallucinations

Hallucinations involve perceiving sensory input in the absence of external stimuli. The syncretic framework can help individuals address hallucinations by:

- a. **Evaluating the consistency of experiences:** Assessing the stability and consistency of perceptual experiences across different situations and time points can help individuals differentiate hallucinations from veridical perceptions (Waters et al., 2014).
- b. **Seeking external validation:** Comparing individual experiences with those of others can provide valuable insights into the reliability of sensory perception and help identify hallucinatory experiences (Bell, Halligan, & Ellis, 2006).

Other Perceptual Anomalies

Various other perceptual anomalies, such as synesthesia or blindsight, can also impact the reliability of sensory perception. The syncretic framework can help individuals address these anomalies by:

- a. **Employing Bayesian inference:** By updating their beliefs considering new evidence and considering prior probabilities, individuals can adapt to perceptual anomalies and form more accurate beliefs (Knill & Pouget, 2004).
- b. **Utilizing thought-experiments:** Engaging in thought-experiments can help individuals explore the implications of perceptual anomalies and develop strategies for coping with these experiences (Hassabis & Maguire, 2007).

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Addendum 7

Addressing Confirmation Bias, Cognitive Biases, and Fallacies within the Syncretic Epistemological Framework

Cognitive biases, such as confirmation bias, and logical fallacies can hinder the formation of well-justified beliefs. In this addendum, I present an everyday example of confirmation bias, discuss how

the syncretic epistemological framework can help identify and correct for this and other biases, and extend the discussion to formal and informal fallacies. I provide references to relevant literature to support my arguments.

Everyday Example of Confirmation Bias

Confirmation bias is the tendency to seek, interpret, and remember information in a way that confirms one's preexisting beliefs while ignoring or dismissing contradictory evidence (Nickerson, 1998). For instance, an individual might passionately believe that their favorite sports team is superior to all others. Consequently, they may focus on the team's victories and overlook their losses or attribute the losses to external factors, such as biased referees or bad weather.

Addressing Confirmation Bias and Cognitive Biases in the Framework

The syncretic epistemological framework provides tools to identify and correct for confirmation bias and other cognitive biases:

- a. **Engage in internal debates:** By considering alternative viewpoints, individuals can challenge their preexisting beliefs and recognize the influence of confirmation bias (Mercier & Sperber, 2017).
- b. **Employ Bayesian inference:** Updating beliefs based on new evidence and considering prior probabilities can help counteract confirmation bias and promote more objective reasoning (Oaksford & Chater, 2007).
- c. **Utilize thought-experiments:** Imagining different scenarios and outcomes can help individuals explore alternative explanations and reduce the impact of cognitive biases (Kahneman, 2011).

Addressing Formal and Informal Fallacies

Formal and informal fallacies are errors in reasoning that can lead to false or misleading conclusions. The syncretic epistemological framework can help identify and correct for these fallacies:

- a. **Foster intellectual humility:** Recognizing one's own cognitive limitations and being open to critique can help individuals detect and avoid fallacious reasoning (Church & Samuelson, 2006).
- b. **Engage in internal debates:** Evaluating arguments from different perspectives and playing devil's advocate can help identify fallacies and improve the quality of reasoning (Mercier & Sperber, 2011).
- c. **Seek external validation:** Consulting with others, including experts, can provide valuable insights into potential fallacies in one's reasoning and help correct them (Mercier, 2016).

In conclusion, the syncretic epistemological framework provides valuable tools for identifying and correcting confirmation bias, cognitive biases, and fallacies in everyday reasoning. By fostering intellectual humility, engaging in internal debates, employing Bayesian inference, utilizing thought-experiments, and seeking external validation, individuals can mitigate the influence of these biases and fallacies on their belief formation process. This comprehensive approach to belief formation promotes more accurate, well-justified, and rational beliefs, ultimately enhancing our understanding of the world and our decision-making processes.

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