

Thinking about Using Thought Experiments: Further Questions

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Thought experiments are not empirical experiments. And the goals that many epistemologists have when they use them extend beyond revealing the inner workings of our psychology. But appreciating our psychology has still taught us some valuable and inescapable lessons. It has taught us that the use of thought experiments can be improved when we learn more about how they work and where the evidential weight they carry comes from. Because thought experiments are conducted by humans and cognition is integral to conducting the method, this will inevitably involve understanding human cognition and underlying mechanisms.

Two approaches have been proposed that epistemologists might take when they use thought experiments. According to Chudnoff, a “psychologistic” approach emphasizes psychological mechanisms. The goal is to understand the inner workings of judgments. Alternatively, an “argumentative” approach emphasizes the theoretical relationship between the cognition that thought experiments pick out and philosophical phenomena. Chudnoff also organizes thought experimentation around the notion of explanation. The goal of using thought experiments is to generate explanations that test publicly debated theories and to improve them. While these approaches may emphasize different aspects of the method, the need for many metaphilosophical interventions discussed earlier in this chapter remains the same.

On the argumentative approach, for example, ‘thought experiment’ is supposed to “pick out a form of reasoning that partly constitutes a certain kind of cognition, namely cognition resulting in judgments about philosophical topics” (Cross Reference Page Number). But in practice, how do philosophers know that a thought experiment picks out the reasoning that it does, what kinds of cognition it constitutes, or whether judgments cohere very well with what is being prescribed or stipulated? After all, it’s an empirical matter whether cognition occurs, how it operates, or whether taking a certain approach manages to achieve the stated goal of improving public reasoning. And it’s reasonable to suppose that studying the very thing that’s integral to the method would be useful in understanding that thing. For these reasons, studying cognition will be essential for improving thought experimentation. It can help researchers better isolate the propositional contents of the judgments they make, assess their causes and constituent parts, and offer more fine-grained information about their nature. Examining judgments in this way makes for better evidence about their subject matter and ultimately the epistemic properties they might explain.

One demonstration of this comes from discussions of high stakes thought experiments in the pragmatic encroachment literature (Fantl and McGrath 2002; Weatherson 2005). To illustrate, consider the following case involving two characters who are trying to decide whether to board an approaching train (Weatherson 2005: 434-5). They share the same good but imperfect evidence that this is the right train but face different practical consequences if they are wrong—one has nowhere to be while the other could miss the start of their daughter’s soccer game! Philosophers report the judgment that the former character has a justified belief that the train is the right one to board, while the latter

does not have a justified belief. Encroachers argue that the best explanation of these judgments is that epistemic justification must be pragmatically sensitive.

However significant philosophical progress can be made by scrutinizing case judgments and the underlying cognition that gives rise to them. For example, a powerful reply to this argument is that encroachment is not required to explain train judgments (Weatherson 2005). One can judge that a character with the same evidence in a different practical environment lacks a justified belief without accepting that epistemic justification is pragmatically sensitive. Specifically, philosophers have argued that the character lacks a *justified belief* not because stakes determine whether the characters are *justified* but because stakes determine whether the characters have a *belief*. Though the details of this account are complex, the response ultimately appeals to how the mind works to understand the structure and significance of cases and case judgments.

Progress in understanding these things is also benefited by interdisciplinary inquiry. In the train example, philosophers attempted to better understand judgments by appealing to an empirical hypothesis developed from research in philosophy of mind and cognitive science. The hypothesis involves how belief works under functionalist analyses of belief. In doing so, philosophers isolated an open theoretical possibility about a certain kind of cognition that also explains reactions to cases and challenges philosophical views. Of course, further research in cognitive science could also determine if this open theoretical possibility is actual. For this reason, experimental science should probably also be used to investigate the cognition involved and to test its ability to explain actual judgments in particular cases (see Turri and Buckwalter 2017). And it is sensible for epistemologists to use the tools that have been developed in experimental psychology for explicitly this

purpose. After all, the judgments really could be telling us something other than we thought. As a researcher, I would not be comfortable taking any of this for granted. Are you?

Compare this response to a very different methodological approach to the train case. According to this approach, one could simply change the case to stipulate that both characters have beliefs and then prescribe a judgment about justification. This would certainly be more flattering to encroachment. But it also leaves out something important. It neglects the possibility that the prescriptions being made run contrary to how belief works. If so, then it is unlikely to yield a good explanation or improve public reasoning. It also increases the risk that we miss out on important theoretical possibilities, overlook relevant relationships between concepts, and mischaracterize the evidential standing of views in the research record. Had the episode played out this way, it would have obscured the philosophical progress in epistemology on norms, knowledge, justification, and belief that occurred in the subsequent literature asking questions about and studying the judgments.

This discussion also raises several interesting and challenging questions for future research aimed at improving thought experiments. One important point Chudnoff raises involves the role of prior theoretical commitments in thought experimentation. Theory ladenness of observation is a well-known problem in science and regardless of the one's approach, will no doubt also influence the construction and evaluation of thought experiments (Bogen and Woodward 1988; Lloyd 2012). It is currently unknown when the influence of prior theoretical commitments interferes with thought experimentation and when this influence should guide or even improve it. Identifying these situations requires

a deeper understanding of the connection between theory and the factors that influence philosophers when they practice the method.

A related question involves knowing how to determine the good-making and bad-making features of thought experiments in the first place. Sometimes this is easy. Avoiding names like “Mr. Nogot” seems like a no brainer. Cautions about the length and complexity of cases seem prudent. But what other variables should we work to emphasize or eliminate in thought experiments and why? Who’s to say which are genuine philosophical factors pertaining to justification or the knowledge relation and which are extraneous? And given that a goal of thought experimentation is to provide possible explanations of those things, what makes for a good explanation of them? Answering questions about these factors that affect our judgments requires careful philosophical reflection that goes beyond experimentation and the study of cognition. But learning what they are is a good first step.

References

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