

## 2016 Thought Experiments Weekend: introduction

I would like to start off the day with a personal view of what I take thought experiments to be, and why they might be a problem.

I take philosophy to be an attempt to achieve a highly generalised and abstract understanding of the human and natural world. It focuses on broad concepts and principles, and its tool is rational argument, in all of its many forms. In modern thought there are two agreed strategies for achieving any reliable knowledge which extends beyond simple experience and common sense. The first is the clear and checkable proofs of logic and mathematics. The second is the agreed results of repeatable empirical experiments in science. Thus we find in modern analytic philosophy a group who take logic to be the paradigm of rational thought, and use it as a basis for metaphysics. A second group take philosophy to be an extension of the physical sciences, and attempts a general interpretation and synthesis of what has been confirmed in the laboratory.

A third group in modern philosophy I will refer to as the 'pessimists'. Their view is that achievement of reliable knowledge by philosophers is an idle dream. They not only reject attempts to directly generate knowledge by philosophical means, but also reject the power of logic to reveal anything more than rule-governed interconnections in strict formal languages, and also reject the objectivity about the physical world that is presumed in the sciences. Thus they not only 'commit to the flames' (as Hume put it) anything which falls outside the logical relations of ideas or the scientific matters of fact, but they are not even very impressed by those two. In particular, they take the concept of truth to be either empty or trivial. Their view centres on anti-realism and relativism, and philosophy is a style of rhetoric rather than a mode of enquiry.

These three camps within analytic philosophy are, I believe, pursuing an honourable trade, and writing interesting books. It strikes me, nevertheless, that the desperation for academic respectability has led them to cling rather dogmatically to their chosen life belt. The logicians cling to their proofs while avoiding doubts about whether logic could actually reveal the structure of reality. The scientific philosophers embrace the language and findings of science, but avoid the big questions about the nature of objects, laws, induction, values, linguistic meaning and so on. The pessimists cling to their denial of truth, objectivity and ultimate reality, while avoiding the fact that science has succeeded by its robust commitment to all three. When challenged by sceptics, the logicians can point to the certainty of proofs, the scientific philosophers can point to the data, and the pessimists can say that they aren't making any significant claims; thus all three groups feel secure.

Meanwhile the community of philosophers who have not made a solemn commitment to either science or logic or pessimism (and I will refer to this fourth group as 'optimists') are trying to pursue their trade in a rather hostile environment. If their work is to have any value, they need to show that it has a fruitful basis which is not merely formal logic, or empirical research. I have not seen much attention paid to this issue, but I take that if there is a 'third way' to achieve philosophical knowledge then it will rely on a concept of reasoning which is neither the evaluation of empirical evidence nor the precise steps of proofs. I think the best word for this idea of broad insightful armchair reasoning is the Greek word *logos*. The word occurs often in Plato, and is sometimes translated as 'giving an account' of something. The point is that the only route to understanding is to provide the *logos*.

The key question, then, is how modern philosophers should understand *logos*, if it is to accompany logic and science in the pursuit of philosophical understanding. Here we encounter what I take to be the main background issue for our weekend on Thought Experiments, which is that reasoning which does not just fall back on formal proofs or empirical data has to place great reliance on intuition and imagination. When reading the works of this optimistic group of analytic philosophers, there is a continual appeal to imaginative examples and intuitive insights, but on the whole the words 'intuition' and 'imagination' are carefully avoided, because they arouse too much suspicion. Foolish intuitions and misinformed imaginings are leading sources of exactly the sort of superstitious falsehoods which all philosophers hope to eliminate. A recently developed discipline called 'experimental philosophy' has come into existence in order to use scientific psychological research methods to demonstrate that the armchair intuitions of philosophers about knowledge,

morality and linguistic usage frequently distort what people actually think. Hence the status of intuition and imagination is somewhat insecure, and their use needs self-awareness and critical caution.

I take it that thought experiments rely on imagination and intuition, so the underlying questions are whether imagination and intuition can be part of rational processes, whether analytic philosophy does indeed extensively rely on them, and whether their results can be subjected to rational criticism. Mere imagination doesn't sound very promising as a route to truth, but it is indispensable, both in counterfactual reasoning, and in exploring the actual world. If we imagine a fire occurring in Rewley House later today, then if we understand the layout of the building we should arrive at potentially life-saving truths about how to behave in the crisis. If we imagine what it is like to be a refugee crossing the Mediterranean in a small boat, this ought to extend our understanding of the modern world, provided that our background facts are fairly accurate.

'Intuition' is used to cover our grasp of the self-evident, and our knowledge of a priori truths, but also our insight into physical evidence. I take Sherlock Holmes to have a powerful faculty of intuition, which arises from the combination of a strong imagination with very accurate collection of relevant data. He certainly seems to be gifted with *logos*, if that is the capacity to achieve a high level of rationality which transcends what is provable or directly observable. Personally I take good intuitions to be rational insights for which the reasons cannot be fully articulated. They produce the cutting edge of speculative thought, which must then face the jury of coherence, logic and experience.

Finally, let me try to distinguish a thought experiment from real and imagined examples. An experiment is a situation which is created in order to focus on one aspect of some type of event. The ideal is to control all-but-one of the conditions, and then vary the one we can alter to see what happens. In science it is vital that the experiment be repeatable. If I offer a real Amazonian tribe which has a certain social arrangement as evidence that we might do the same, you will use imagination and intuition to evaluate my suggestion, but it doesn't count as an experiment. If I describe an imaginary tribe that has a surprising social arrangement, that gets closer to being an experiment.

For a true 'experiment', though, I would suggest that we need an imagined tribe with certain fixed features (about environment and economy, perhaps), and we then try out various imagined arrangements, and picture the imagined results. Thus, for example, the original Trolley case was an example, but it became an experiment when we saw that the key ingredients, of who was going to die or survive, could be varied, to test our intuitions. The case of the fake barns (where your knowledge of a perceived real barn is undermined by the surrounding fake barns) would qualify, because you can imaginatively vary the proportion of real barns to fake ones. When Wittgenstein asks us to test our view of meaning by saying "it's cold here" while meaning "it's warm here", this seems to fit because we can test it with a wide range of words (such as trying to say "Plato" while meaning "Aristotle"), which might produce different results.

Apart from the role of intuition and imagination in the use of thought experiments, one pressing issue seems to concern the extent to which the thought experiment is possible. An obvious example would be Locke's intuitions about the mind of a prince and a pauper being exchanged, which tell him that the prince resides wherever the mind of the prince is located. We might agree with that intuition, but reject the conclusion because minds cannot actually be exchanged. A second pressing issue is whether thought experiments are valid at the limits of our imaginative powers. For example, thought experiments about transplanting and dividing brains seem to be technically possible, but I doubt whether even Sherlock Holmes has the intuitive power to accurately assess where he is located if half of his brain is now in Dr Watson.

Many other problems will, no doubt, arise during the day. Let me finally recommend a degree of caution. A professor of philosophy at a well-known university was recently suspended for falsifying the results of some thought experiments. Of course one bad apple does not ruin the crop, but we must all be alert when assessing the reliability of results achieved in this way.

**Book:** *The Tragedy of Reason: the Platonic logos*, by David Roochnik