# Is Science Just Another Ideology?

Paul Feyerabend is a (in)famous philosopher of science who argued that science was simply one more all-encompassing **ideology**—that is, it just one more set of beliefs that people hold, and that they want to convert others to. Just as Christianity, Islam, or Marxism have dominated education and politics in certain places and times, science dominates education and politics in the modern “West.” Feyerabend argues that, insofar as science is today’s dominant ideology, we ought to be skeptical of it and encourage others (especially children) to avoid thinking that something is “true” or “good” simply because it is “science.” Feyerabend’s arguments have been picked up by various critics of science; however, it’s not always clear what Feyerabend himself actually thought. Basically, Feyerabend often says provocative things, only to later claim that “he didn’t really mean them.” With this in mind, we can distinguish between two different theses he (sometimes) seems to defend:

1. The *strong* thesis that there is no difference between science and any other ideology
2. The *weak* thesis that methodological pluralism and theoretical conflict are good for science.

When considering Feyerabend, it’s important to remember that one can accept the weak thesis without accepting the strong thesis. So, for example, you might think that science really does provide the best guidance in most situations, but nevertheless think that arguments about science and method are good, at least in the long run. In this lecture, we’ll be taking a look at each thesis separately.

## The Strong Version of Feyerabend’s Thesis: Science as Brainwashing

“In a democracy scientific institutions, research programmes, and suggestions must therefore be subjected to public control, there must be a separation of state and science just as there is a separation between state and religious institutions, and science should be taught as one view among many and not as the one and only road to truth and reality.” (Paul Feyerabend, Against Method)

Here’s a paraphrase of Feyerabend’s argument that “science” as currently practiced is basically a form of brainwashing, and for this reason must be challenged.

**Premise 1: Science is an ideology.** It is all-consuming, in the sense that “believers” in science automatically discount the validity of any non-scientific criticisms of it. It dominates political discussions (e.g. politicians spend public money on science they would not spend it on religion) and education (children are all taught basic science, but not any other ideology).

According to Feyerabend, science wasn’t *always* an ideology like this. Up until the 19th century or so, he thinks that it was a useful counterweight to Christianity, which was the ideology of the day. However, things are different now. People no longer believe in science for the “right” reasons; instead, they believe in it because it is what they were taught as children, and because they are afraid of the consequences if they profess disbelief (e.g., they will lose their jobs). So, Galileo, Newton, and Darwin were “good” scientists and not “bad” ideologues; it’s just that science’s place in society has changed.

**Premise 2: All things being equal, we have reason to think that ideologies are always bad for people**. We have at least two main examples in the West: medieval Christianity (which led to the Inquisition, among other things) and Marxism (which led to many dictatorships). While Feyerabend holds that these were based on “good ideas” in some sense, it was wrong to indoctrinate children in these ideologies, and it was wrong to assume that one could structure a society *solely* around “one big idea”.

**Conclusion:** S**o**, we should oppose science, at least when it takes on the character of an ideology in its ideological sense. How might we do this? Feyerabend isn’t always very clear, but he suggests things like the following:

* Teach students things that oppose science, like religious creation myths. Make sure that they understand that science is *one possible belief system* and not *the only possible belief system.*
* Give some public some to projects that *don’t* have scientific backing, such as Chinese medicine (Feyerabend is writing in the 1970s, when this was an issue) or ESP (it’s not entirely clear whether Feyerabend is being serious here or not).
* In general, whenever we are worried that science is becoming an ideology, we should try to reinforce the idea that science is fallible, that it is simply one way of doing things, and there exist alternatives.

**An Objection**: We generally have concrete *reasons* for favoring science over other ideologies, when it comes to things like teaching children and making decisions. For example, we care about things like curing cancer, developing a food supply capable of feeding the world, etc., and that science is (by far) the best way of doing these things. It seems like adopting Feyerabend’s view would directly conflict with our abilities to do these sorts of things. Feyerabend might respond that this criticism isn’t fair, because it basically assumes that “science” is always right, and nothing else might work.

## The Weak Version of Feyerabend’s Thesis: Against the Scientific Method

“A scientist, an artist, a citizen is not like a child who needs papa methodology and mama rationality to give him security and direction; he can take care of himself, for he is the inventor not only of laws, theories, pictures, plays, forms of music, ways of dealing with his fellow man, institutions but also of entire world views, he is the inventor of entire forms of life.” (Paul Feyerabend)

Feyerabend’s argument above suggests that he thinks that science is bad, in just the same way that Christianity was bad for medieval Europe and that Marxism was bad for Russia and Eastern Europe. His writings also suggest, however, that he has a healthy respect for science and the results it has gotten. How do we reconcile these things? A different way of reading Feyerabend is to see him as attacking the idea that there is one uniquely “scientific method,” which doesn’t commit him to criticizing science as such. Feyerabend’s idea, essentially, is that we ought to create a society that encourage lots of crazy, strange ideas (regardless of whether they are scientific) because this is the best way of making sure that science continues to be successful in the future. The philosopher Elizabeth Lloyd has argued that, Feyerabend seems to be adopting an argument from John Stuart Mill (who Feyerabend often cites). Here’s a rough idea of how the argument goes:

**Premise 1: We have no clear way of determining which theories are “scientific.” So, we shouldn’t waste time trying to do this.** Karl Popper is simply wrong about scientific theories being “falsifiable.” Almost every actual scientific theory is *already known to be false,* in the sense that they all yield false predictions about something or other. Ideas like Kuhn’s “paradigm” are just too vague to be of any use. After all, how do we reliably determine what counts as “paradigm”? So, policy makers and educators shouldn’t be asking themselves “Is this scientific?” They should just be asking “Is this a good theory? What is the evidence for it?” If it’s a good, well-supported theory, we should use it. If it isn’t, we shouldn’t.

**Premise 2: There are always an *infinite* number of possible theories that could be used to explain all of the facts we know about. So, we have no particular reason to think that the theories we currently hold are *true.*** As a matter of logic, Feyerabend is right about the “infinite number of theories” bit: for any finite set of experimental results or observations, we can always come up with an infinite number of theories that can explain these. The mere fact that a theory “beat out” its competitors doesn’t necessarily mean that is true, or even “more true” than the competing theories were. It simply means that the theory worked best for what we were interested in. So, policy makers and educators shouldn’t simply ask scientists “What’s the truth about subject matter X?” They instead have to consider ALL of the benefits and drawbacks of adopting a potential theory. This actually requires knowledge of the relevant theory—there’s no simple, easy-to-apply rule that will tell us whether a theory is good just by looking at it.

**Premise 3: It helps society to make sure that theories outside the mainstream are discussed.** There is no simple rule for determining where the next “successful” theory will come from. Successful theories might find their inspiration in philosophy, religion, art, etc. If the history of science is any guide, the best theories (at least to begin with) will strike us as “absolutely crazy.” Old theories that have already been “abandoned” often come back and have remarkable success—for example, both atomism (the idea that everything was made of small atoms) and the idea of a sun-centered universe go back thousands of years, but didn’t really become part of science until the 1600s. Even if the old theories are entirely false (and don’t even have a grain of truth), discussing them still allows us to understand our own theories *better*—i.e., we understand why it is that people decided to adopt the current theory and abandon the old theory.

**A (Different) Conclusion: On Lloyd’s reading, Feyerabend is actually *defending* science, and is making proposals about how to improve it.** The only reason Feyerabend is defending non-scientific views mainly because he thinks that discussing them will allow us to be more successful at science in the future. On Feyerabend’s view, scientists (and all of us) shouldn’t be afraid to wade into debates about evolution vs. creationism, or folk medicine, or the way economics works. We should, of course, take arguments from scientific experts seriously, but we should also try to *understand* their arguments, and understand why/how they might wrong. Feyarabend thinks this is not only good for us (since it helps us apply science in better ways), but also good for science, at least in the long run (even if scientists get annoyed having to explain and defend their view all of the time).

## Review Question

Choose a current political/social debate that concerns science. Explain the debate the best you can, then briefly consider how Feyerabend might respond to it. How might his response differ from that of Popper or Kuhn? Examples: The teaching of creationism in public schools, the response to climate change (or the coronavirus), the role of economics in public policy, the safety of GMO foods.