

IS A THEORY NOT REALLY A THEORY UNLESS IT HELPS EXPLAIN WHAT WOULD SHOW IT IS WRONG? KARL POPPER'S FALSIFICATION DOCTRINE.

Karl Popper believed that scientific knowledge is provisional – the best we can do at the moment.

Popper is known for his attempt to refute the classical positivist account of the scientific method, by replacing induction with falsification.

Falsification is a proposed way of demarcating science from non-science. It suggests that for a theory to be considered scientific it must be able to be tested and proven false.

For example, the hypothesis that "all swans are white," can be falsified by observing a black swan.

For Popper, science should attempt to disprove a theory, rather than attempt to continually support theoretical hypotheses.

It is said by religious apologists and even some scientists that Karl Popper is wrong to say that a scientific theory is not fit to be called that unless it tells you how it may be shown false.

Popper observed that a theory that is wrong will still have a lot of truth in it and that is why we need the theory to help us be cautious. A theory should be cautious. A good theory which is not the best one is dangerous for one false interpretation or inaccuracy opens the door to more errors and leads to confusion that only hinders those who want the truth. We need a theory to tell us how to refute our theory so that we can tell a theory that respects science from one that does not and which probably pretends it does.

It is obvious that something you cannot question or be prepared to drop if the evidence says so is going to blind you. That is not science. This applies to any theory not just a scientific one.

By the way, metaphysics claims to be science about a non-natural plane. Metaphysics is like a science beyond the natural. Except it is not a science in the sight of anybody sane. God is a metaphysical theory and so God suffers that problem too.

Here is a good account of what Popper said and it shows to state what he said is enough to prove him right.

Summary of Poppers Theory [<https://www.simplypsychology.org/Karl-Popper.html>]

Refutations of Popper are invalid -

The essential and decisive one would be "It is sometimes best to stick to your theory when it is attacked or seemingly refuted for at times it is still right." The fact that your theory turns out right in the end is luck. It does not mean you should have been that stubborn. Guessing correctly in an exam does not mean guessing is a good method.

However, there is a difference between holding off on abandoning your theory when new evidence comes to light that conflicts with it for it takes time to look at the new evidence and in just being stubborn.

Perhaps sticking to the theory does not matter. In that case, drop it if the evidence says so for if it is right it will rebound. Evidence needs to be processed and rechecked so it will have the final say.

The critics of falsification say that science has done well despite few scientists using falsification tests. But surely the scientists were using the falsification tests at the back of their heads? If they were not then despite how good science is now its arrival has been delayed because of them!

It is said, "One disproof cannot overthrow an entire theory for the experiment or observation may be misguided."

That is not a refutation of Popper but of bad methodology. It in fact props Popper up.

Popper, we are told by critics, is thinking of a theory as one statement or whatever but it is in fact a summary of something hugely complex - a summary of data all joined together and connected which is why one disproof is not enough. Falsification is aware of that and every theory should tell us what kind of disproofs we need and to what extent.

Working out grounds for falsification is hard to apply to some forms of science and hard to work out. That is not a proof that Popper is wrong. Many right and sensible things are hard. As getting at the data is complex, and as the data is complex, it is hard for anyone to work out what it is saying about how to falsify a theory. That does not make falsification in the Popper methodology false. It makes it difficult. A difficulty does not amount to a disproof. It is a practical matter.

Critics don't want to admit that working to verify the probability or truth of something and working to falsify are two sides of the same coin. To verify x is by default to falsify what says x is wrong. The latter may be at the back of your head and if you are not spelling out what shows a theory false. But it is no less real. We learn both from trying to verify and trying to falsify. The best knowledge demands both.

Karl Popper told us, "A real theory of science tells us how it may be proven wrong." That is an ideal in many situations. It is what we must always aim for no matter how much we fall short. Any problems with falsification do not invalidate it as an ideal. We should clearly wish that every theory would outline how to show it is wrong.

Falsification is about scientific theory but it can be about other forms of theory too.

If a theory is not fit to be called a theory unless it tells us how to refute it then the loving God idea is out for religion says every evil that happens fits God. It would let any disproof of God from evil be seen as such.

Religionists when they say there is evidence that Jesus rose in a miracle try to make out the contrary evidence is a miracle too done by Satan to destroy the truth. So this tries to avoid any hope of being refuted too.

Naturalistic atheism says there are no real spirits or miracles and there is no God either. It fails to be a theory unless it tells us how it may be proven wrong. Negative atheism says it is not a claim but merely a lack of belief in God dodges falsification for it is not theorising. Expand that to negative naturalism and the same thing happens.

We conclude that falsification is not a theory but a method for creating theories and its usefulness and validity are incontestable.