

Examples of fallacies of weak induction

PHIL 110

For each passage, indicate whether the fallacy being committed (if any) is one of the following:

appeal to unqualified authority

appeal to ignorance

hasty generalization

false cause—*post hoc ergo propter hoc*

false cause—*non causa pro causa*

false cause—oversimplified cause

false cause—gambler's fallacy

slippery slope

weak analogy

1. Physicists tell us that the universe began as an explosion from an infinitesimally small point over 13 billion years ago. They call that 'The Big Bang'. So it's likely that the Big Bang was what started the universe.
2. There really hasn't been any proof one way or the other as to what caused the Big Bang—certainly no one has ever conclusively proved that the Big Bang wasn't caused by God. So God caused the Big Bang.
3. In a recent poll of 1,287 Americans who characterized themselves as evangelical Christians, 90% believed "with the highest certainty" that God caused the Big Bang. Another 9.5% had the same belief "with great certainty." It follows that an overwhelming majority of Americans believe that God caused the Big Bang.
4. In a recent poll of 1,180 Americans who characterized themselves as "non-religious", 2% believed "with the highest certainty" that God caused the Big Bang. Another 3% had the same belief "with great certainty." 65% thought the Big Bang had no cause, 20% thought the Big Bang caused itself, and the remainder answered "not sure." It follows that most Americans either think the Big Bang had no cause, or that it caused itself.
5. In a recent poll of all seven full-time faculty members in CCU's Department of Philosophy and Religion, two thought the Big Bang was caused by God, four thought the Big Bang either had no cause or that it caused itself, and one refused to answer the question because he claimed he had no idea what the question meant. It follows that most of CCU's Department of Philosophy and Religion think that the Big Bang either caused itself or had no cause.
6. Early in Earth's history, long before life evolved, comets and meteors rained down with great violence. It is thus likely that life was transplanted on Earth from such comets and meteors.
7. About every 65 million years, a large enough asteroid strikes the Earth with an impact large enough to cause massive species extinctions. This has happened many, many times in Earth's history. It's been about 65 million years since an asteroid impact caused a species extinction that wiped out the dinosaurs. We're due for an asteroid impact—get your life in order.
8. About every 65 million years, a large enough asteroid strikes the Earth with an impact large enough to cause massive species extinctions. This has happened many, many times in Earth's history. It's been about 65 million years since an asteroid impact caused a species extinction that wiped out the dinosaurs. Such an asteroid impact is going to happen again eventually.
9. We have studied the Earth's moon extensively, and it has very little atmosphere and no volcanic activity. It stands to reason that given such extensive studies, the moons of other planets in the solar system have no volcanic activity either.
10. All of the large gas planets in the solar system have rings, Saturn having the most prominent ones. None of the terrestrial planets have rings. It's thus likely that the gaseous nature of the planets with rings is the reason for why those planets have rings.

11. The plant kingdom has the greatest number of species on earth, compared to the other kingdoms. Most plants reproduce by producing seeds of some sort. How then should we think of the origin of the universe? Given that plants are so plentiful, it stands to reason that the universe came about in roughly the same way. So there has to have been some kind of “seed” that grew into the universe. But then it follows that something *alive* had to give birth to the universe!

12. Several billion years from now, the sun will expand to a size so large that it will likely consume all of the inner terrestrial planets, possibly including the Earth. Once that happens, Earth’s atmosphere and oceans will boil away, and all living things will get cooked away as well. Some time after that, the sun will shrink to a smallish cold star called a white dwarf. Sounds depressing, but we have at least 900 million years to go before any of that happens.

13. Should we try to stabilize the Earth’s population through mandatory family planning? Well, if we don’t get the earth’s population stabilized at a level where our consumption habits are sustainable, we’re going to use up all of the Earth’s available fossil fuels. If that happens, then we’ll have to use nuclear power to make electricity. If we do that, then eventually there will be a nuclear meltdown. But if that happens lots of times, the entire Earth will become inhospitable from all the radiation. With enough radiation, that will adversely affect the Earth’s magnetic field, causing the Earth to break out of its orbit and wander aimlessly into outer space. Do you want that to happen? Then we need some serious family planning policies.

14. It’s fairly well-established that at least some of Earth’s water arrived on Earth in the distant past courtesy of the impact of comets, which are composed of significant amounts of water. Without the presence of water on Earth, humans could never have evolved. It’s amazing to think about, isn’t it—comets caused the origin of humans.