

## Handout 8: The Fine-Tuning Argument

### I. Other *A Posteriori* Arguments for God's Existence

- A. O'Reilly's Argument from the Tides  
*Reply: A Good Alternative Explanation: The Moon's Gravity*
- B. Paley's Argument from the Human Eye  
*Reply: A Good Alternative Explanation: Darwin's Theory of Evolution*

### II. The Fine-Tuning Argument

P1. The laws of physics and the initial conditions are "just right" for life (that is, only a very narrow range of all the ways the laws and initial conditions could have been support life, and our universe falls within that very narrow range).

"The laws of science, as we know them at present, contain many fundamental numbers, like the size of the electric charge of the electron and the ratio of the masses of the proton and the electron. ... The remarkable fact is that the values of these numbers seem to have been very finely adjusted to make possible the development of life." (Stephen Hawking, *A Brief History of Time*)

- P2. This is highly improbable if there is no God.
- P3. This is not so improbable if there is a God.
- P4. If observation O is much more likely given hypothesis H than given the denial of H, then O strongly supports H.
- C. Therefore, the fine-tuning evidence (P1) strongly supports the hypothesis that there is a God.

Two ways in which this conclusion is less strong than the conclusion of the Ontological Argument:

- i. The most this argument establishes is the existence of God as an intelligent designer, not God as the greatest conceivable being.
- ii. The conclusion is logically compatible with atheism. The evidence it purports to provide for God's existence could be outweighed by other evidence against God's existence.

### III. Objections to the Fine-Tuning Argument

#### A. Any set of laws is just as unlikely as any other

*Objection:* "The laws and the initial conditions had to take some specific set of values, and any precise set of values they might take is just as unlikely as any other precise set. So that they took the life-permitting values they took doesn't require any more explanation than if they had taken some non-life-permitting values."

*Reply:* Compare this reply for the “rocks on the beach” case: “The rocks on the beach had to be arranged in some way or other, and any precise arrangement they might take is just as unlikely as any other. So that we find then in the sentence-spelling arrangement that we find them doesn’t require any more explanation than if they had been in any non-sentence-spelling arrangement.”

## **B. The “Anthropic” Objection**

*Objection:* “It isn’t surprising that we find the universe ‘just right’ for life, since if it weren’t, we wouldn’t be here to find it some other way. Thus, the fine-tuning data is not improbable, even if God doesn’t exist.”

*Reply:* The Firing Squad. And: “We shouldn’t be surprised to find that the laws support life, but P1 isn’t just saying that; it is also saying that only a narrow range of all the ways the laws and initial conditions could have been support life.”

## **C. Other Forms of Life**

*Objection:* “P1 assumes that life would have to be roughly like us. But maybe there could have been other possible kinds of life, life that could have arisen even in universes with laws and conditions that we have a hard time imagining.”

*Reply:* The Fly on the Wall. “All the argument requires is that the *nearby* possibilities fail to permit life.”

## **D. The Multiple Universes Hypothesis**

*Objection:* “Maybe our universe is just one of very many universes, each differing randomly in its physical laws and initial conditions. (These may all presently co-exist, or might occur in sequence.) On this hypothesis, it is to be expected that some of these universes will be fine-tuned for life. The vast majority that aren’t fine-tuned don’t have anyone there to observe that fact. Of course we would be in one of the ones that is fine-tuned — that shouldn’t surprise us.”

*Collins’ Reply:* “ ... invoking some sort of many-universes generator as an explanation of the fine-tuning only kicks the issue of design up one level, to the question of who designed the many-universes generator” (Collins, “God, Design, and Fine-Tuning,” §IV).

*Rejoinder:* “That we need to appeal to an intelligent designer to explain the ‘many-universe generator’ (if there even is one) is much less clear than that the fine-tuning data needs to be explained.”

*Another Reply to the Original Objection:* The Multiple Dart Rooms Hypothesis; The Inverse Gambler’s Fallacy.

*Rejoinder:* Modified Inverse Gambler’s Fallacy Example. The Multiple Planets Hypothesis as a reply to a Planets-Based Fine-Tuning Argument.