

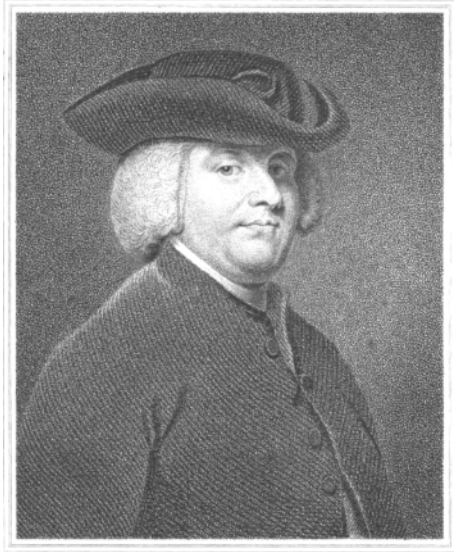
IRREDUCIBLE



COMPLEXITY

William Paley (July 1743 – May 1805) was an English clergyman who wrote several books. He finished his education at Christ's College Cambridge and later became a fellow and tutor there.

Paley is best known for his analogical design argument, which he presented in his *Natural Theology*. There he likened the universe to a watch, arguing that if we were to discover a watch in a natural environment then, due to its order, complexity and purpose, we would rightly infer that it was the work of an intelligent designer; these features are the hallmarks of design.



WILLIAM PALEY

His argument is known as a *teleological proof* of the existence of God as creator of the Universe:



- The watch could not have come about by accident (unlike a rock or stone);
- The existence of the watch is proof of a watchmaker;
- The universe is intricate in its design e.g. the complexity of life, the scientific laws that govern the Universe;
- The universe could not come about by accident;
- The universe itself is proof of an intelligent designer.

Modern scientists, philosophers and theologians who adopt this argument will refer to the complex biochemistry of life as evidence for a supremely intelligent designer. The information content of DNA, which controls a cell and contains the blueprint for life, is seen as proof of God, who has designed and created life. The “fine tuning” of the physical laws that govern the Universe are also seen as evidence for a divine creator.

Not everyone agrees with this argument and philosophical naturalists maintain that life, the universe and everything is an accident or a serendipitous event.

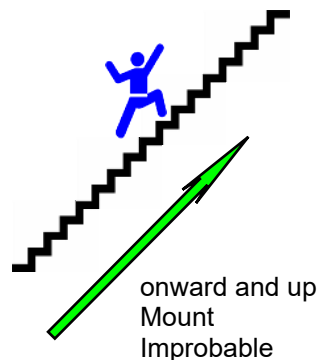


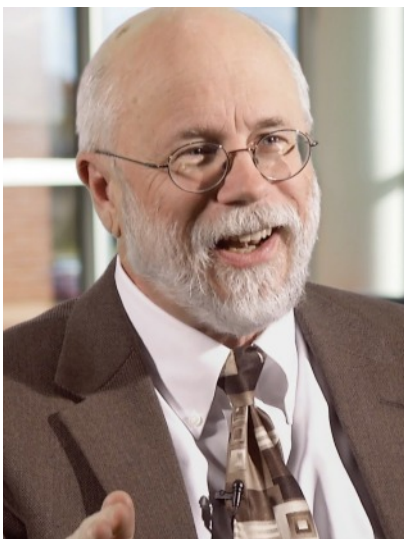
RICHARD DAWKINS

Richard Dawkins is an academic zoologist. He was Professor for the Public Understanding of Science at Oxford University. He remains a fellow of New College Oxford. He has written several well known books on evolution and why he believes there is no supernatural creator. He advocates a viewpoint that life may give the appearance of having been designed, but in reality the evolutionary process working over very long time periods can eventually come up with elegant “design solutions” by means of natural selection. In this scenario there is no teleology, no pre-determined goal or desired end point. The only determining factor is preferential survival.

So how does Dawkins account for the existence of highly complex creatures such as primates, who all have advanced integrated organ systems and sensory organs? One of his books is entitled “The Blind Watchmaker”. In this book he explains how he believes that the advanced “design” of living things is the result of *cumulative selection*. This means that a series of very small changes in successive generations eventually add up to a large change. Each small change is produced by a mutation in the reproductive DNA, and a process of natural selection “chooses” the best changes. Therefore an eye or an ear does not have to come in to existence suddenly but can arise very gradually one small step at a time. This idea overcomes the need for the production of huge, highly improbable, genetic changes which could code for novel organs.

In his book “Climbing Mount Improbable”, Dawkins claims that sudden massive genetic changes in organisms, that are most unlikely to happen, can in fact happen via a large set of very small genetic changes that are far more likely. This is at the root of cumulative selection and means that, given enough time, bacteria can literally develop into a biologist. Therefore, there is no need for an intelligent designer or creator of life.





MICHAEL BEHE

Michael Behe is a professor of biochemistry at Lehigh University in Pennsylvania. He famously wrote a book called “Darwin’s Black Box”. In this he argues that many biochemical systems have a number of component parts and stages that enable them to function, which could not have evolved in small steps. The reason for this is that until the very last stage was in place, the system could not function and so any intermediate states of development would have zero selective advantage. This precludes any evolutionary development via a mutation and selection process. Two examples he uses are blood clotting and vision.

Professor Behe called this feature of systems **IRREDUCIBLE COMPLEXITY** simply because if the biochemical system is reduced by even one component it ceases to function. Therefore, the system cannot be downgraded to a simpler functioning state as - just like taking a gear wheel out of a watch mechanism - it will cease to work. This observation has one very important implication:

AN EVOLUTIONARY PROCESS CANNOT PRODUCE COMPLEXITY

This is because mutation and selection are blind processes with no intelligence or foresight. Small changes that would be part of a complex system cannot be selected for and preserved pending the next stages. A lucky accident may preserve one change but there are thousands of irreducibly complex systems in the human body. Consequently, Mount Improbable cannot be climbed as there is no motivation to take the next step.

The only conclusion is that life was designed and created. The Bible records this in Genesis chapter one. God himself created life on Earth.

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