

## Print Ontology: The Third Person Logic of Deism and Design

1. Descartes himself remained a practicing Christian, but other more radical thinkers quickly followed who argued that we should not believe anything further about God than what reason itself could demonstrate. After all, it was these further religious beliefs that inspired all the religious violence tearing Europe apart.
2. And so as true sons of the Enlightenment they renounced any further Christian teachings or rituals. They were not Christians, they were “Deists”—believers in God, but God alone; not necessarily in Jesus and certainly not in Jesus as himself God.
3. Deists refused to supplement reason with revelation. Or better reason itself was the sole reliable organ of God’s revelation. Mystical revelation did not transcend human reason but was irrational enthusiasm and gullible superstition. Religious ritual suffered a similar fate. The Protestant reformers had sought to purge Christian ritual of its mimetic excesses, but a methodical rational purification of religious ritual left nothing to purify. All ritual was superstitious “hocus pocus.”
4. But what counted as reason was at the same time being extended, beyond objective, deductive logic to include an inductive empirical 3<sup>rd</sup> person logic of the impartial, external and detached observer. If the printing press had enabled people to read for themselves and critically analyze in solitude the arguments made by their absent authors, the availability of paper enabled scientists to record for themselves impartial observations of the natural world however numerous their observations, and however trivial each individual fact might be in isolation.
5. Many scientists were drawn to become naturalists, to document, identify and classify all forms of life into a universal systematic table or phylogenetic tree.
6. This empirical approach to science, like the deductive, geometrical method of Descartes was in opposition to science as scribal hermeneutics of the traditional authoritative texts of Aristotle and Galen. Not only did scribes not have a library of their own to read and critically analyze in solitude, but they did not have abundant paper of their own to record their observations. It was also only once scientists could afford the paper to record their own observations, that experiments could move beyond exemplary demonstration to the actual testing of new hypotheses and the redundant confirmation of hypotheses already

validated. In other words science shifted from a didactic or dogmatic method of analysis, such as found in Descartes, to an experimental method of empirical research.

7. In effect with paper, scientists could afford to record data that might end up only refuting an erroneous hypothesis rather than confirming a true insight. So too only with cheap and available paper could scientists afford to reproduce already successful experiments recording ultimately redundant data that only confirmed what scientists already believed to be true. (1) Then inductive method similarly depended upon the printing press to run off exact reproductions of their detailed and carefully glossed field drawings of newly discovered species of flora and fauna and reliable replications of numerical data sets, charts and graphs, than could ever be done by even an army of the most conscientious scribes.
8. What these naturalists found in their explorations of the natural world was that the patterns they discovered were too intricate and complex to be deducible from general laws of matter in motion. They were not merely confirming patterns already deduced theoretically in the manner of Cartesian physics, they were more often discovering patterns not even imaginable before, new forms of life that could not simply be deduced from a conceptual classification tree. Now once discovered their place in a universal classification table of nature could be located, but often new subdivisions needed to be created to differentiate them.
9. A contrast with chemistry is instructive here. Once Davy had created a new table of elements, to replace the traditional table of metals, salts, liquids, gasses, etc., (1) he could confirm his theory by searching for new elements corresponding to empty boxes in his table. Naturalists were not able to do that. (2) The classification of species was just too vast and the potential differentiation of species just too unpredictable to be able to deduce in advance which boxes remained for the naturalist to fill in.
10. The overwhelming complexity of the classification table of nature, and the complexity of the interactions between the myriad forms of life, would give credence to a new “empirical” argument for the existence of God. The design of nature could not be proven to be necessary, deducible from some set of first principles. But the design was also far too wondrously complex to be the product of random chance. It rather constituted

empirical evidence for the existence of a designer, one intelligent enough, powerful enough and beneficent enough to effect such a wondrous mechanism—God.

11. The canonical argument for the existence of God from the design of nature was published by the naturalist and clergyman William Paley at the beginning of the nineteenth century. Paley compared the order being found in nature to the most accurate and intricately designed machine of his day, the pocket watch. (1) If one should walk along a beach and pick up a beautifully polished stone, he mused, one could suspect that its beauty, its color and smoothness, were the product of purely natural forces. However if one were to stumble across (2) a pocket watch one could only imagine it to be the product of an intelligent designer, a skilled craftsman who had deliberately manufactured the mechanism for a deliberate purpose, the measurement of time. Nature he argued was being found by naturalists to be even more complex than the most sophisticated pocket watch. In fact nature was even more wondrous yet—unlike the most finely made watch, nature repaired itself; its parts could even reproduce themselves. What could possibly have produced the natural world? Only one possible cause was intelligent enough, powerful enough, and beneficent enough to fit the bill—God.
12. Kant would refer to the design argument as the most compelling argument for the existence of God. He argued that it was only a hypothetical argument delivering at best merely probable knowledge rather than a geometrical demonstration. And Kant argued that the content of our idea of God was ultimately conceptually empty, a merely regulative ideal of reason. But he admitted that there were no other candidates that could fit the bill. Even the skeptical Hume, the ultimate empiricist, had no alternative hypothesis to test out.
13. In fact, for many naturalists, their scientific observation of nature was at the same time a religious practice. Like Paley many were churchmen, pastoring in rural areas that afforded both the time and the opportunity to walk about in nature and discover and describe new species of flora and fauna for analytical classification. In doing so they did not see themselves so much reading the mind of God as did Spinoza and other objective philosophers, but rather as exploring his creative activity in the world. The naturalist might be detached and analytical in his observations of nature, but he could also find himself transported in wonder and awe at the intricate beauty of God's creation.

14. Thus while deists were critical of traditional religious ritual as irrational superstition, reason itself could prove a religious ritual, a practice that could both inspire and humble, reconnecting the naturalist to what he held sacred, life itself, in its surprisingly intricate interlocking mechanisms and all its lush variety, pointing inescapably beyond itself to only possible cause, the divine architect himself.
15. Nature became a new locus of the sacred. Before the rise of modern science, nature was the lair of the demonic, beyond the reach of reason and civilization. Mountains and forests, seas and oceans forbidding, dangerous and wild, literally having a will of their own that was unpredictable and capricious, callously indifferent to human life. But with the success of modern science and the wonders of technology it enabled, nature was no longer a threat but increasingly a refuge, from the very reason that had tamed it. Appreciation of the overwhelming expanse and power of the world no longer evoked terror but rather awe and reverence. For those who lived in cities, nature was pure, innocent, sublime. In our very inability to fully explain it or technologically control it, nature transcended humanity. It was not below us, but beyond us.
16. Reason revealed the human soul to be sublime as well. Proof of its immortality could not only redeem death's terror, but justified a rational faith in morality as well. An infinitely wise, powerful and good God could be rationally trusted to reward virtue and punish vice, appearances to the contrary. Since such a moral order was not always evident in this life, then eternal life after death must be postulated to right the balance. For if reality were to be rational, it must be rational in practice as well as in theory. A given event or object might appear evil, but such a judgement must itself ultimately be a product of prejudice, precipitousness or pride. Reality for the deist's rational religion was still a cosmos, not only well ordered but beautifully and meaningfully so. Indeed faith in reason itself entailed belief that our world must be the best of all possible worlds.
17. The design argument, so overwhelming in the eighteenth century, fell in the nineteenth with rise of the theory of evolution. Natural selection over random mutations provided an alternate natural mechanism to explain nature's design. As Laplace famously responded to an incredulous Napoleon, God was no longer needed to account for the design in nature. The existence of God became an extraneous hypothesis. And since the argument

from design had become such a persuasive argument, its refutation threatened to bring down religious faith in general with it.

18. Ironically, Darwin himself was hired as a chaplain as well as a naturalist on the Beagle on whose voyage of exploration he discovered and recorded the observations of many new species that would lead him to develop his theory of evolution. In this, as we have seen, he was no different from many other naturalists who were also churchmen. He would remain very ambivalent towards the religious implications others were drawing from his theory.
19. In the twentieth century there has been two retrievals of the design argument, no longer at the level of species and organisms, but one at the microlevel of cellular components and processes currently beyond the reach of contemporary biology to account for in evolutionary terms, and another at the macrolevel of cosmological conditions and constraints necessary for evolution to operate at all.
20. Retrieval of the design argument at the micro is often referred to as “intelligent design.” It exploits the holistic logic of organisms already identified by Kant as beyond the power of mechanistic explanations to account for. An Organisms behavior depends on the behavior of its parts, but the behavior of its parts dependent on the behavior of the whole. Each serve as both cause and effect of the other. But if neither is causally prior how could an organic whole ever come into existence? Intelligent design theorists look for cellular components and processes that exist only in function of the whole they serve. How could these evolve independent of its companion parts within the whole they both cause and depend upon? How could say DNA evolve without RNA to read it, or RNA without DNA to be read, or a parent cell to generate them both? Indeed, how could life itself evolve from dead matter in the first place?
21. The response to intelligent design at the microlevel has been to point out that what science has yet to be able to explain should not be seen as a limitation of the theory but rather as a research project for further investigation. (1) The lack of a full explanation for everything is not a bug for a feature of science, evidence of its continuing fertility for the advance of knowledge. A “God of the Gaps” strategy of targeting what science has yet to explain as evidence for the existence of a transcendent God beyond science ironically

serves only to remove God ever further from the world we do know and from relevance to ordinary life.

22. Retrieval of the design argument at the macrolevel is referred to as the “Anthropic Argument”. This, too, does not pretend to demonstratively prove the existence of God but rather raises the question whether the basic laws of nature and fundamental constants in physics upon which all scientific theory rests, themselves call for some kind of explanation. It is possible to logically construct virtual worlds with different laws and constants. To take but one example, if the force of gravity were but a little weaker, stars would never form and so evolution would never have any material upon which to operate. On the other hand, if the force of gravity were a little stronger, stars would implode too soon, and so evolution would not have the time to operate. As it happens the strength of gravity is just right for cosmic evolution to generate untold trillions of suitable planets and thirteen billion years for which life and ultimately intelligent self-conscious life to eventually evolve. People have identified a large number of such “goldilock conditions” necessary for life, let alone intelligent life, to evolve. Does not the fact that the universe as it exists is so remarkably “fine-tuned” for the evolution of intelligent life itself constitute evidence of design that calls for some kind of explanation? In other words why is our universe hospitable to the evolution of self-conscious intelligence such as ourselves? What accounts for a universe designed to ultimately “wake up” and become self-aware?
23. Rebuttals to the anthropic argument have appealed to an evolutionary mechanism at work at any even greater macrolevel, that of universes themselves. For all we know there are multiple universes and they are being spawned all the time. Some operate under laws and constants that give them a short lifespan, others longer lifespans. In this case that we live in a universe that is hospitable to our evolution is a tautology not a mystery to be solved. Now there can be no empirical evidence for the existence of other universes, any evidence would by definition be evidence in our universe. For example, some have speculated that black holes may be the wombs of other universes, and that our own universe exists within the womb of some other universe’s black hole. after all we have no idea what happens to the energy that falls into a black hole. it is lost to us by definition. Perhaps it spawns another universe inside it or at its other end. Now such a multiverse

model is not an empirical theory, it cannot be confirmed or falsified by any possible experiment conducted within our universe. It is rather speculative metaphysics, perhaps over the ontological status of other logically possible worlds. In that sense it is no more scientific than the anthropic argument's designer God.

24. In fact it is analogous to some cosmological speculations by transhumanists who propose that our universe may be a virtual simulation, built and designed by some alien civilization. One prominent Transhumanist, Nicholas Bostrom, even argues that this is likely. If there is intelligent life on other planets even within our own universe, given its age of 13.5 billion years, there are likely to be intelligent species who have evolved and developed virtual technologies thousands and even millions of years ago. Look what we have been able to do in just 25 years with the internet and virtual computing. What could not be possible over the next thousand years, million years of technological progress? there may be alien species that already live our transhumanist dreams.

Now if we did have the knowledge and power to design a simulated universe would we not do so? After all, a simulated world is just a video game on steroids. So, since it is likely that there are alien intelligent species with virtual or post-virtual technologies thousands or even millions of years in advance of our own, is it not also likely that we are someone else's virtual world? In which case we have another answer to the design question. Our universe has been designed for the evolution of intelligent self-awareness. But our designer is not God, it is an alien intelligence endowed with sufficient knowledge and power (and goodness?) to have designed our universe as a virtual world for its interest and/or amusement (who of course is likely living in a virtual world himself designed by some other even more advanced alien civilization....)

25. Indeed, in my video lectures on virtual theology I explore the extent to which we might model God's own creative activity on designing, powering and operating a video game. (For a development of this idea, see my video lectures in the Virtual Theology series on Virtual Trinitarianism and Avatar Christology.)

26. So how arbitrate between these various possibilities?

- a. The Anthropic argument: There is one universe wondrously hospitable to the evolution of intelligent self-aware beings such as ourselves, that then points to the existence of a designer God.

- b. The Multiverse argument: There are multiple universes each with various consistent sets of natural laws and cosmological constants. Some are small and short lived (if one can even make sense of spatial and temporal categories applied to universes not in our space time continuum), others may be vast, long lasting, with a set of laws and constants that enable the evolution of intelligent life. Being intelligent life forms ourselves, we necessarily live in one of the latter. There is nothing more to explain.
  - c. There is an even vaster, perhaps infinite multiverse consisting of all logically possible universes. Our existence proves that intelligent self-aware life is possible, and so exists in any number of these universes. So again there is nothing more to explain.
  - d. Our universe is the virtual reality of some alien intelligence who designed our universe for the emergence of intelligent self-aware beings such as ourselves.
  - e. Our universe is God's virtual reality designed, powered and operated by him.
  - f. To question why there is something rather than nothing is a meaningless question in principle. Explanation or understanding just is to relate something to something else. To ask about everything at once, leaves nothing to relate everything to.
27. None of these speculative proposals are testable scientific hypotheses. We cannot arbitrate between them by appeal to any empirical evidence. Nor could we do so by conceptual analysis, assuming all are logically consistent, by whatever logic you want to attribute to that world. In any case, our concepts are hardly likely to prove applicable in a different universe.

I would argue then that arbitration between them would be inevitably a religious exercise. Which alternative best enhances the meaningfulness of our own lives? Which understanding of reality best connects us to what we hold sacred, were we to believe in it? And it would be a matter of believing *in*, rather than believing *that*, for any of them would require a "leap of faith", beyond the limits of any possible scientific knowledge. Belief would not be the result of an experiment or the conclusion of an argument but a decision, and a commitment, to a way of understanding reality and our place in it. It would be a way of thinking and living, a way of being in the world. It would be a religion.