

Dear Tom Holland:

I read your book, *Dominion* when I heard you describe your surprise at realizing how much contemporary Western values diverge from those of the ancient world and discovering that it was the influence of Christianity. It is wonderfully written, and I learned a great deal about the history of Christianity. But you are a historian, and what struck me as a philosopher was that your history overlooks the role of metaphysics in Western culture. I agree that Christianity played a central role, but I believe there is a deeper cause of the difference between Western and other civilizations on Earth. Though its discovery depends on the prediction of a scientific revolution that you are probably not in a position to judge, you can see why it is likely, and in any case, you may find my explanation of the West interesting because it reveals something about the nature of human history. It implies that there are necessary stages of evolution, including three stages in the evolution of language-using animals, and the West is different from the rest because it is the stage that follows the stage represented by other civilizations. Though the prediction of such a discovery may seem unlikely, you can see how it is plausible, and the historical causes that you describe have a different significance when they are seen as part of what I call the metaphysical stage. What this implies about the nature of human history will interest you as a historian, and you may be more optimistic about the future of humanity because it shows how Christian values will survive the death of supernaturalism.

This explanation of Western civilization depends on a scientific revolution that will be triggered when physicists make a discovery that solves all the problems of modern physics. That is not as unlikely as it may seem, because it is a discovery about space and we know that it exists. It is the discovery that space is a substance that interacts with matter, and that fact is hidden from

physics by its assumption that laws of physics are the deepest possible knowledge about the natural world. The secret sauce that has made physics so successful for centuries is the use of mathematics to formulate its laws. But it also causes seemingly intractable problems in modern physics, so physicists are trapped inside a box. They will begin to think outside that mathematical box when they abandon the assumption that mathematics is known by a faculty of rational intuition and recognize that its truth can be explained by its correspondence to a world constituted by two substances, space and matter, enduring through time. Since interactions of substances with their essential natures can generate only quantitatively precise regularities, scientists can infer spatio-materialism as the best explanation of the “unreasonable effectiveness” of mathematics in discovering laws of physics. This discovery will be confirmed by discovering powers that enable interactions of space and matter to generate all the regularities described by laws of physics, because that will solve the problems of modern physics.

Ontology is the study of existence, and since substances are the cause of what exists, this discovery will reduce physics to ontology. These ontological causes entail a kind of efficient cause, not recognized by physics, called geometrical causes. Since they work together with physical causes, their discovery will trigger a scientific revolution, and by filling fill all the explanatory gaps in specialized sciences, it will explain the nature of the good. Geometrical causes are at work in nature because space gives the matter that helps it constitute atoms (and bodies composed of them) the power to impose their unchanging geometrical structures on what happens by physical causes, the kind of efficient causes that is recognized by physics. That will clear up puzzles about the nature of entropy in thermodynamics in a way that gives the life sciences a deeper and more complete explanation of evolution than Darwinism. Biologists will be able to

explain why life evolves on suitable planets throughout the universe, and they will discover a series of inevitable stages of evolution that bring beings like us into existence.

This discovery about evolution will explain the origin of life, and since that reveals its nature, it will show that goodness is an essential aspect of the nature of life. Life begins when geometrical causes acquire the power to go through reproductive cycles on their own by choosing between incompatible goals, such as growth and reproduction. Life is basically a choosing machine, so what matters to living organisms is choosing goals that are good over those that are bad. This explanation of the nature of life also implies that there are four forms of life. As each form of life evolves, it gives rise to a new form of life in basically the same way that the first form evolves from nonlife, except that it is a choosing machine on a higher level of geometrical organization. First, there are prokaryotic cells, then eukaryotic cells, followed by multicellular organisms, and finally there are spiritual organisms. By spiritual organisms, I mean groups of language-using mammals whose only body is all the multicellular animal bodies of its member, so parts of the highest form of life that can evolve in this way on suitable planets have a spiritual nature. They are subjective animals because they have a faculty of imagination, and they become reflective subjects when the use of language enables them to represent the causes of their behavior as part of the very process of causing it. That enables them to see into the minds of others and understand the causes of their behavior, so recognition of the equality of all reflective subjects is part of their spiritual nature. Since cooperation is essential to the way that spiritual organisms survive, obeying rules about how they treat one another that promote conditions under which they can cooperate is basic to their spiritual nature—as basic as cells following a genetic plan is to the development of a fertilized egg cell into a multicellular animal. In short, morality is an essential

aspect of the spiritual form of life. Choosing good over evil is good for beings like us because that is what we must choose to live the form of life we have. Science will explain why we ought to be moral.

This explains what is true about contemporary Western values, but it doesn't explain why the values of the ancient world were so different. That is because there are three stages of spiritual evolution caused by three levels of geometrical organization in the languages used. At the first stage, represented by archaic humans, sentences have a simple subject-predicate grammar that enables them to represent states of objects in space. At the second stage, language-using mammals become reflective subjects, and the increase in the power of language to coordinate behavior is so great that it gives rise to civilization. Civilizations are spiritual organisms in which a class structure of some kind enables them to have a huge population spread out over a vast territory, and their culture includes a religion that justifies the domination of one class over the other, not to mention taking members of other spiritual organisms as slaves. This is the psychological stage of spiritual evolution, which is represented by the ancient world as well as other civilizations on Earth.

It is relevant to notice that the psychological stage explains the moral nature of reflective subjects in a way that reconciles free will and determinism. Though every event in a world constituted by space and matter is completely determined, reflective subjects have a free will because their behavior is guided by a geometrical cause. As a choosing machine, its function is choosing between goals, including the basic function of choosing good over evil. And reflective subjects are responsible for what they choose because the ability to represent the causes of their behavior as part of the process of guiding it means that they can choose which desire to act on in any situation, and they have a spiritual desire that

enables them to do what is required by moral rules (and other authoritative parts of culture) even when it is contrary to self-interest or opposed by strong animal desires. Since they can always have acted otherwise when they do wrong, they are justly held responsible for what they do. And since the spiritual desire derives from the desires constituting the dominance hierarchy in pack animals, public punishment for wrongdoing can be justified in some cases because it strengthens the spiritual desire in much the same way that young alpha males that are defeated in challenging the leader of their pack acquire a new desire to be a follower. By strengthening the spiritual desire, punishment, like tough love, makes it easier to choose good over evil—and increases the power to defer gratification in doing what is in one's self-interest.

Though ancient Greeks were like other reflective subjects at the psychological stage of evolution, they were different because they happened to believe that beings like us are capable of perfect knowledge. That is basically what made Western civilization different from all other civilizations. The pre-Socratics believed that the empirical method would discover the first cause of the natural world and explain everything found in it, and metaphysics began when Plato assumed that reflective subjects have a cognitive power, called Reason, and tried to show that Reason enables them to know Reality behind Appearance. In either case, knowledge of the nature of what exists most basically would explain goodness. But the claim to know Reality behind Appearance made it possible to hold that Rational beings know with certainty the difference between good and evil, and they were responsible for choosing good over evil because Reason also gave them a free will. That was the precocious issue of a marriage of Platonic metaphysics and Christianity during the ancient era, and since it held that everyone is created in the image of God, the belief that everyone is morally equal became

the foundation for the evolution of culture in Western spiritual organisms after the fall of Rome.

The genius behind contemporary Western values was a metaphysical religion that claimed to know the existence of a transcendent God. That is a stage of spiritual evolution that follows the psychological stage because metaphysical arguments have a higher level of linguistic organization than the arguments normally exchanged by reflective subjects. There is more to be said about the metaphysical level of linguistic organization because it depends on consciousness and a role it plays in helping cause a stage of evolution that can be explained only by solving the mind-body problem. But this is the gist of the explanation of Western civilization as an inevitable stage of evolution that I predict science will discover in the revolution triggered by the discovery about space being a substance that interacts with matter. Evolutionary biologists will see your history of Christianity describing concrete details of stage of evolution that has a necessary way of unfolding, and my hope is that you will be interested in considering the possibility of locating human history in a deeper and more complete context.

My argument is presented in a trilogy that I am self-publishing, called *Naturalistic Reason*. The first volume, the *Unification of Physics*, gives my reasons for believing that the problems of modern physics will soon be solved, and the second volume, the *Unification of Science*, gives my reasons for predicting that a revolution in the life sciences, caused by the recognition of geometrical efficient causes, will enable naturalists to explain the difference between good and evil in a way that resolves disagreements about the nature of the good. The explanation of Western civilization as the metaphysical stage of evolution is defended in the third volume, the *Unification of Science and Philosophy*. Since parts of consciousness are what

metaphysicians mean by Appearance and Reason, this explanation depends on using spatio-materialism to explain how consciousness is part of the natural world. It also depends on discounting an illusion inherent in consciousness, so when a science discovers this explanation, it becomes a form of Reason knowing Reality behind Appearance. But I call it naturalistic Reason because science uses the empirical method. Besides explaining the Cartesian mind by the brain, it will explain the Christian God by the natural world. When the metaphysical stage is complete, it will be clear that the natural world has all the perfections traditionally attributed to God except for creating it from outside space and time. What is more, naturalistic Reason will enable beings like us to recognize how the belief in the crucifixion of Christ, the doctrine of the trinity, and the origin of our spiritual nature in the Garden of Eden are true in the spatio-material world.

The prospect of reading a detailed all-inclusive explanation of the natural world in three volumes is daunting, even for someone who believes in the rational pursuit of truth, so I am offering a simpler way of learning more about it. An executive summary of the argument is presented in a short (150 page) book titled *Sapere Aude* that I am also self-publishing now. I intended to include a free Amazon link to an eBook version of it, but since Amazon links are location based, I cannot send gift links to recipients in foreign countries. Instead I will include the Amazon.uk link (see below). And there is more information about this argument at natReason.com, including an introduction to the trilogy, a Table of Contents for it, and a bookstore.

Since you will wonder about who is asking you to consider such an unlikely argument, let me say something about myself and its origin. I have been working on this argument, pretty much on my

own, for over 45 years, while teaching philosophy at American University for 30 years and since retiring from teaching over 20 years ago. As a philosopher, I have written this argument with a care that justifies expecting it to stand up under such scrutiny. There may be incomplete or mistaken arguments in it. But I am confident that the discovery that space is a substance that interacts with matter will eventually cause the scientific revolution I predict, and I am prepared to defend it on all fronts. My reason for writing you and a few others is to make what I have discovered public. I am about to turn 83, and I believe that it is my duty to tell others about my discoveries because my spiritual organism has given me the leisure and privilege to enjoy a life spent in such an exceedingly meaningful way. I would be happy to answer any questions you may have and very grateful to learn about any problems that you think may cast doubt on it. You can reach me personally at philliphscibner@yahoo.com.