

Dear Dennis Prager:

I admire the work of Prager University. Its lessons are arguments presented clearly enough for viewers to judge for themselves what to believe, and as a philosopher, that's what I believe in. I have also learned from what you say, and I am writing you because I was struck by your answer to Jordan Peterson's questions about how to sum up the message of the Torah. I can't find the video, but as I remember it, you said that it teaches us that there is a difference between good and evil. That is, I believe, a truly profound way of summing it up, and I have a way of explaining why it is so profound that you will find interesting, even if, as an orthodox Jew, you cannot accept it.

A scientific explanation of the difference between good and evil is just one implication of a discovery that no one expects, though it may be the most important. I believe that physicists are on the verge of making a discovery that will solve the seemingly intractable puzzles of modern physics and trigger a scientific revolution that explains all the regularities that hold necessarily, including one that defines moral goodness. Let me start at the beginning and sketch how the argument unfolds.

The discovery that physicists will make is not as unlikely as it may seem because it is a discovery about space and we know that space 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 since the use of mathematics also causes all the seemingly intractable problems in modern physics, physicists are trapped in a box. They will begin to think outside that 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 these 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 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 members, 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.

Let me also mention that this naturalistic explanation of the origin of beings like us explains our moral nature 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 the desires on which they in particular situations, and they have a spiritual desire that enables them to do what is required by moral rules (or some other 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.

My argument predicting this scientific revolution 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.

But there is a third volume because this is not the only consequence of the predicted discovery about space. The reduction of physics to ontology will enable scientists to explain how consciousness is part of the natural world, and when ontological scientists trace the existence of their complete scientific explanation of nature to philosophy, they will discover that Western civilization is a distinct stage in the evolution of life. The genius behind most of Western philosophy is metaphysics, by which I mean the belief that we have a cognitive power, called Reason, that enables us to know Reality behind Appearance, and so I call Western civilization the metaphysical stage. Intuitionistic metaphysics failed because made a false assumption about the nature of knowledge that was based on an illusion inherent in consciousness. But it founded a culture that was confident in Reason, and its highpoint, the Enlightenment, gave us the principles used as premises in many arguments of Prager University. The rise of a science based on physics has made them hard to defend, and recognition of their validity will be restored by the ontological explanation of Western civilization as the metaphysical stage. But that is not only its most profound consequence.

Metaphysics was Plato's shortcut to the perfect kind of knowledge that the pre-Socratics had expected to acquire by using the empirical method to discover the first cause. They had agreed that substances are the first cause, though they disagreed about the natures of the substances constituting the natural world. The assumption that Reason is a faculty of intuition was Plato's shortcut because he claimed, in effect, that its knowledge of the natures of those substances was deep enough to explain the nature of the good and vindicate his teacher, Socrates. That is

what ontological science will accomplish by explaining why we ought to be moral, and putting aside the long story about the eventual failure of intuitionistic metaphysics in Western philosophy, what I want to emphasize is that when ontological scientists discover that it was a distinct stage of evolution, they will explain not only how the Cartesian mind is identical to the brain but also how the Judeo-Christian God is identical to the natural world. Indeed, they will predict that when the metaphysical stage is complete, it will be clear that the natural world has all the perfections attributed to its creator, except for existing outside space and time. It will turn out that there is much truth in such religious beliefs as the origin of our spiritual nature in the Garden of Eden, the meaning of the crucifixion of Christ, and the doctrine of the trinity.

My prediction is that a science based on ontology will discover how to defend the deep moral lessons of Western religion and, not to put too fine a point on it, bring about heaven on Earth. That is a possible scientific explanation of philosophy because what intuitionistic metaphysicians meant by Appearance and Reason is consciousness (or parts of it). The discovery about space being a substance that interacts with matter will enable science to explain how consciousness is part of the natural world, and since that exposes the illusion inherent in consciousness, ontological scientists will be able to discount the intuitionist illusion when they trace the origin of ontological science to the exchange of metaphysical arguments in Western philosophy. They will, therefore, find themselves knowing Reality behind Appearance. This is the perfect knowledge sought by metaphysicians. But it is also the perfect knowledge sought by the pre-Socratics, since ontological scientists will know that the first cause of the natural world is space and matter. However, as naturalists who use the empirical method to know what really exists, ontological scientists will insist that their perfect cognitive power be called naturalistic

Reason. This is the upshot of the argument in the Unification of Science and Philosophy, the third volume of Naturalistic Reason.

The prospect of a naturalistic solution of the mystery about divine transcendence may not appeal to you, at least, not at first. But in any case, it is grounds for optimism at a time when Western culture seems to be losing the treasure it inherited from the Enlightenment. And I hope that what I have said will interest you in learning more about naturalistic Reason. Though there may be incomplete or mistaken arguments in my trilogy, I am confident that the discovery that space is a substance that interacts with matter will eventually cause the scientific revolution I predict. Since this sounds too good to be true, let me say something about 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, 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.

Even to someone who believes in the rational pursuit of truth, the prospect of reading a detailed all-inclusive explanation of the natural world in three volumes is daunting, so I am offering an easier 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 am including a free Amazon link to an eBook version of it. (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, a bookstore, and more information about me. 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.