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EVOLUTION

The Secret Behind the Propaganda

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"Everybody" knows, one might suppose, that evolution is about facts and the creation model is about belief. Certainly this was the message of the PBS TV series entitled "Evolution." An internal memo sent to PBS stations stated concerning evolution, "All known scientific evidence supports evolution. . . . New discoveries over the past 150 years have all supported the validity of the theory of evolution." (PBS Internal Memo. 2001. *The Evolution Controversy: Use it or Lose it*. Evolution Project/WGBH Boston. June 15, p. 5). The memo further defined a scientific theory as a "higher level of understanding that ties 'facts' together" (p. 5). As to the creation model, the memo dismissed it as "not science. It is part of a religious belief system . . ." (p. 6). Such statements and other similar ones over the years have convinced many that science in general and evolution in particular are based on observations from the natural world and thus they are empirically or factually based. The interesting thing is that this is not the modern understanding of science among scientists themselves. They have long since abandoned much concern for actual data.

The modern outlook on science is readily apparent from remarks by scientists about their discipline. It was David Hull, a well-known philosopher of science, who wrote as early as 1965 that ". . . science is not as empirical as many scientists seem to think it is. Unobserved and even unobservable entities play an important part in it. Science is not just the making of observations: it is the making of inferences on the basis of observations within the framework of a theory."¹ Within this statement we see what appears to be a balance between facts and interpretation or theory. Dr. Hull, however, had a dubious grasp of what constituted data. The previous year, he had written concerning the concept of descent with modification from a common ancestor (phylogeny or evolution): "The first factor in the phylogenetic program and the only one that is of an empirical nature is phylogeny, but even phylogeny is not a brute fact to be discovered merely by looking and seeing. Phylogeny, the subject

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matter of phylogenetic taxonomy, is an abstraction. It is an abstraction in two respects. First, it is inferred almost exclusively from morphological, genetical, paleontological, and other types of evidence and is not observed directly.”² His thoughts concerning evolutionary descent, we discover, were merely conclusions, not directly indicated by the evidence.

Views on the nature of science were actually in a state of flux at the time that Dr. Hull wrote these papers. Karl Popper in 1934 had pointed out that no theory in science could ever be proven true. The only alternative, he suggested, was to try to prove that theories were false. Those well-tested theories which had not been falsified or disproven on the basis of experimental data, would then qualify for the designation of scientific theory. The only catch was that many areas of scientific research did not meet these criteria. Theories which could not be falsified, were said to be metaphysical (belief-based) rather than scientific. Accordingly an editorial in the scientific journal *Nature* in 1981 pointed out that both Darwinism and the idea that God created the world, were metaphysical theories since “the course of supposed past evolution cannot be rerun.”³ However, such embarrassing characterizations of Darwinism as nonscientific were on their way out. Thomas Kuhn had published his book, *The Structure of Scientific Revolutions*, in 1962 thereby ushering in a post-empirical age in scientific understanding.

According to Thomas Kuhn, all science must be conducted in terms of a unifying set of ideas. Without such a theoretical system, said Kuhn, facts were meaningless and science nonexistent. According to philosopher of science, Del Ratzsch, in his recent book, *Science and its Limits*, this primacy of theory over data has had enormous implications for the practice of science. The result is that empirical data are not that important to science anymore. According to Dr. Ratzsch: “in arguing that we have no paradigm-independent access to some ultimate reality and that paradigm choices are in part value choices made by scientists, Kuhn is moving the ultimate court of appeal concerning correct pictures of reality away from the world itself [data] and toward the informed consensus of scientists.”⁴ Dr. Ratzsch further pointed out, “Since there is no complete and stable and independent external reality to which we have access, there is no particular point in talking about truth in science. . . .”

So what do modern scientists do with data? What they do is to interpret their data in terms of the current scientific paradigm. They do not seek to falsify any paradigm such as evolution because paradigms are not supposed to be easily toppled. Individual falsifying facts won’t cause a paradigm to be rejected. Even a lot of contrary data will have little effect on a paradigm. Evolution of course is the most obvious paradigm which is largely immune to the influence of empirical data. Cosmology is another.

The most obvious casualties of this new definition of science are the concepts of reality and truth. Biologists Mark Siddall and Arnold Kluge, in 1997, for example, suggested that “‘the search for truth’ was a misguided venture in science from the start and one that has no basis in reality.”⁵ They further opined that “Truth, though not irrelevant to science, is nonetheless irrelevant to the choice among scientific theories, because it is unknowable.” Nevertheless these authors conclude that the

good news is that we will keep on doing science. They depict the situation thus: “Our assertions regarding the terminal elusiveness of this truth may be seen by some as troubling or even nihilistic. We counter that it is the impossibility of achieving truth that ensures the continuation of scientific endeavor, and that guarantees our perpetual realization of that which is more valuable than truth itself—understanding.”

Science has definitely come a long way. Initially in the eighteenth and nineteenth centuries, actual observations (empirical data) were highly valued. In some cases they were esteemed too highly. Some people like eighteenth century Scottish philosopher David Hume declared that there was no reality other than what our senses could discover. The material world was all there was. Gradually theory came to be more important until at the present time empirical data are often ignored. Not all scientists, however, support the Kuhnian appeal to consensus among scientists. Tom Settle, another philosopher of science, deplored the situation. “Many thinkers, seeing that the search for truth is an unending quest, abandon it (in despair perhaps), and settle for agreement with their fellows. If they are right that it is consensus rather than truth that ought to be aimed for in science, then the picture that emerges . . . is gloomy.”⁶ The worst aspect of the situation is that scientists so dogmatically defend interpretations which are based only on consensus. “But what is vacuous is to abandon truth as regulative and then to agree to something’s being so. And it undermines science rather than affirms it, since it rules out appeal to reality, it rules out striving to be objective.”

It is evident that modern scientists do not attempt to prove paradigms or important theories like evolution wrong. They merely interpret their data in terms of the paradigm. Evolution is a philosophical starting point, not an observation. As Siddall and Kluge remark: “Biologists are no more immune to the requirements of a sound philosophical foundation than are these other sciences if our occupation ever is to be more than a simple cataloguing of the experiences of our senses. Evolutionary biology, and phylogenetics in particular, demands this even more because, like the quantum physicist, we are not able to observe that which we seek to explain.”

Another biologist, Andrew Brower characterized “descent with modification” as a circular argument or a metaphysical assumption. “There is clearly an ontological leap between tests of individual observations and tests of ‘descent with modification,’ if the latter is even testable without tautology.”⁷ “If ‘the background knowledge of descent with modification’ underlying cladistics is not testable by independent means, it would seem to be more a metaphysical First Principle like vitalism or orthogenesis than a component of a Popperian hypothetico-deductive approach.” In other words, evolution is not falsifiable, but is an *a priori* assumption.

Christians, on the other hand, typically take a much more traditional or empirical approach to science. They expect that when contrary data are pointed out, that the hearer’s response will be to reject the paradigm. All too often however, the hearer minimizes the significance of the data, calling them merely “anomalous” or poorly understood. Most supporters of evolution theory expect that the obvious problems will eventually be solved and in the meantime they concentrate on less controversial aspects of the paradigm.

For the present, consensus by scientists is indeed used as a major point in favor of a paradigm. Individuals arguing from a minority position already have a major strike against them. Some scientists also claim that science is an all or nothing proposition with no room for a critical evaluation of individual aspects of the discipline. It was Hull who articulated the all or none principle. He was referring specifically to evolutionary versus numerical [empirical] categorizing of organisms, and this same argument is used today against the creation model. “Are the inductive inferences made by evolutionists in reconstructing phylogeny sufficiently warranted? . . . Any decision . . . must rest on the advances of the various sciences using the techniques of discovery and justification which they do use. Hence, induction is justified by an induction! The arguments presented by the empiricists against evolutionary reconstructions if sound would annihilate not just evolutionary taxonomy but all empirical science.”⁸ According to him, it is pointless to contest scientific speculations on the basis of data, because the whole scientific enterprise holds together. If some theorizing is acceptable, then all of it is beyond challenge.

Since the importance of empirical data in science has long since been downgraded to a subsidiary importance relative to theory, the PBS statements concerning evolution and creation are all the more interesting. The PBS memo implied that evolution could easily have been falsified by negative empirical evidence. On the contrary, scientists have devoted their best efforts to protecting evolution theory from negative data. In actual fact, it is the creation model supporters today who so frequently appeal to empirical evidence (such as the coded nature and information content of DNA) and the evolutionists who so blissfully fail to recognize the significance of these very same data. Indeed, when all is said and done, the essence of much modern science is that it is not empirical at all but rather *post*-empirical or theory based. That’s quite a difference. Maybe PBS should run a new creation-based series to alert the public to the real situation.

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