
[1] The topic of Robert Royal's monograph is one that has long needed to be seriously addressed. While there is no shortage of examinations of spirituality and environmentalism written from a "New Age" perspective, Royal's study fills an important gap in existing scholarship by providing a scientifically-informed, conservative Catholic perspective on these issues. He takes a strong stand against the facile demonization of Jewish-Christian (or more generally Western) ideology to be found in less religiously orthodox writers on the environment. Such positions, he argues, are the result of a cursory understanding of both scientific data and theological debate. By reading the evidence more carefully, Royal works to demonstrate that, far from being the root of all environmental evil, there is much that the Bible and more traditional Catholic dogma can teach us about how to properly care for the earth. The Virgin and the Dynamo aspires to be an intellectually informed apologetics for the recently neglected environmental ethic of stewardship. What's more, Royal's study, while specifically devoted to environmental questions, also speaks to a larger and longer standing tension between religion and science, as is indicated by his title, taken from Henry Adams. For Adams, as for Royal, The Virgin is "an image of the fullness of religious belief and human meaning as well as beauty and nature itself" and the Dynamo is "the efficient and powerful achievements of modern science and technology" (10). The struggle between these two iconic forces, according to Royal, provides a framework for understanding the post-modern Western environmental crisis from both a religious and scientific perspective. His book argues "that an answer to some environmental questions may still be found in the classical religious views of the West, supplemented by science and the wisdom of other traditions - that is to say, in the recognition that both the Virgin and the Dynamo are necessary to a full human life and the ongoing evolution of the universe" (29).

[2] Throughout, Royal eschews advocating either conservationism or developmentalism, or systematically privileging theological over scientific speculation. Using Biblical tradition and an interpretation of ecological data as guides, Royal ultimately opts for what he terms "intelligent development." Central to Royal's ability to advocate such a position is his
understanding of the idea of creation from both a theological and a scientific perspective, and, more significantly, to locate the places where these perspectives may not be mutually exclusive. Through exegeses of a range of religious and scientific thinkers, from St. Augustine to Stephen Hawking, Royal suggestively reads the findings of theoretical science to support assertions of divine intention in creation. From this premise, Royal is able to build his argument in favor of human stewardship of nature.

[3] Yet Royal's notion of stewardship also relies upon two related critical points - points that contradict what Royal believes to be central tenets of contemporary American environmentalism. His first point of contention is with ecocentric ethics and practice based on the idea that humans are no different and no better than the rest of nature or on the notion that humans may in fact be bad for the rest of creation. His second point of disagreement is with the popular notion that the ideal environment is one that is static and unchanging. Royal relies on theologians for arguing the former question and on scientists for the latter. Reasserting a renewal of the "Great Chain of Being," according to Royal, would reinforce our responsibility toward the rest of nature. Accepting the unpredictably changeable nature of nature would further absolve us of guilt for our past misdeeds and can, in Royal's presentation, it seems, free us from excessive worry over whatever damage we might inadvertently do. While those who are not Christian may be unwilling to accept the doctrinal premises that allow Royal to argue against the anti-humanism of ecocentrism, the argument overall is presented coherently and firmly grounded on a thorough exploration of the works of earlier thinkers and recent scientific discoveries. In many respects, Royal's review of literature pertinent to environmental questions is the most valuable feature of his work, even despite his less than objective interpretive conclusions about some primary materials. In the first half of the book, particularly, the deep background is provocatively analyzed, and his complex argument is elegantly interwoven with thorough exegesis.

[4] The second half of the book, however, is somewhat less successful. The section opens with a chapter entitled, "A Hopeful Interlude." In it, Royal takes on what have been identified as some of the most serious environmental threats the world faces today and attempts to show that they are not quite so serious as the popular environmental movement portrays them to be. Selectively reading scientific data, he is able to paint an overly rosy picture of the long-term effects of the unholy disregard humans have shown to the rest of God's creation. Royal correctly highlights the uncertainties of modern science regarding issues such as global warming or ozone depletion. But he seems to ignore the fact that ambiguous scientific data does not mean one can safely assume that no threat exists. Some of the claims he makes, including questioning the toxicity of dioxins, are foolhardy and reduce his credibility as an interpreter of ecological science.

[5] Royal is more convincing as an interpreter of theology and philosophy. He is at his best in providing critical analyses of the works of Father Thomas Berry, Frederick Turner Romano Guardini, and Deep Ecology founder, Arne Naess. However, even here Royal's readings are not consistently thorough. Throughout, he suffers from a tendency to caricature positions counter to his own. Nowhere is the tendency more evident than in his chapter devoted to (what he presents as) ecofeminism. While in other chapters Royal had shown himself to be a painstaking researcher, demonstrating a comprehensive knowledge of the corpus of each (male) author whom he discusses, in the chapter on ecofeminism, his skills...
strangely lapse. Royal does not focus his analysis, as he does elsewhere in the volume, on work by a particular thinker (though there are numerous very astute ecofeminist theorists, including, for example, Carolyn Merchant or Patrick Murphy). Rather, he appears to have derived his notions of the main tenets of ecofeminism from a cursory reading of a single collection of essays published eight years ago. While Royal's critique of the work of Matthew Fox in the previous chapter is more scathing than his categorical dismissal of ecofeminism, at least in the former case, the reader can be confident that Royal is working from a full familiarity with his subject.

[6] Overall, however, *The Virgin and the Dynamo* bravely endeavors to reconcile the positions of both contemporary religious and scientific thinkers on the question of how humans might behave in an ethically grounded and scientifically informed fashion. Royal is correct that some schools of environmental thought may need to revise assumptions about the goal of environmental action (in particular that the best environment is a static one). Moreover, he convincingly rehabilitates the moral reputation of the ethic of Christian environmental stewardship. However, in the end, Royal seems too ready to forget that the environmental groups, whose positions he seeks to correct, have been responsible for preventing most of the first world from completely obliterating the possibility of all life, human or otherwise. Instead, he appears too ready to believe that good Capitalists and good Christians would have taken the steps to curb the West's destructiveness of their own accord. While it would be reassuring to believe that large multinational chemical companies such as Union Carbide would figure out "the right thing to do" (as it would be to believe that the dioxins they dump are not really that toxic), Royal's faith in the capitalist Dynamo obscures some of his more reasonable conclusions to the serious questions posed by the book.

Bridget Keegan, Creighton University