



Book Reviews

Inside the Velikovsky Affair

Cosmic Heretics: A Personal History of Attempts to Establish and Resist Theories of Quantavolution and Catastrophe in the Natural and Human Sciences, 1963 to 1983. By Alfred de Grazia. Metron Publications, P.O. Box 1213, Princeton, NJ 08542, 1984. 398 pp. \$23, paper.

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THAT IMMANUEL VELIKOVSKY remained so long a public figure is arguably due to the efforts of Alfred de Grazia in the 1960s. De Grazia was editor of the *American Behavioral Scientist*, which devoted a whole issue to the Velikovsky Affair, later expanded into a book (*The Velikovsky Affair—The Warfare of Science and Scientism*). The claim was pushed that, the substantive merits of Velikovsky's ideas aside, the affair revealed something seriously rotten in the state of science, most particularly in the lack of receptivity of science to new ideas. Accepting that claim, a number of humanists and social scientists engaged in public criticism of the scientific establishment for unfairness and for transgressing even the accepted norms of scientific behavior. The Velikovsky Affair continues to be cited as an example of science's unwillingness to consider alternatives to its current world-view. In *Cosmic Heretics*, de Grazia holds to that stance and also makes plain that he does not now leave aside the substantive merit of Velikovsky's ideas. He in fact believes Velikovsky's most general claim, that the earth and its inhabitants have been crucially influenced by recurring catastrophes of global extent, occasioned by extraterrestrial agents in very recent times (the past 15,000 years or so). That belief, or set of beliefs, de Grazia terms *quantavolution*.

Were this book simply an exposition of de Grazia's views about aspects of quantavolution, it would hardly warrant a review in *SI*; de Grazia himself recog-

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nizes that the audience for that is small. But *Cosmic Heretics* will be of wider interest because it has things to say about Velikovsky and his associates that cast a clearer light on some aspects of the Velikovsky Affair, particularly on what has remained a puzzle to pundits: Why were some of the reactions to Velikovsky so very extreme, for instance, the boycotting of a respected publishing house? In this review, I shall say a little about the book itself and its mistaken views regarding science and then focus on what it reveals about the Velikovsky matter.

The book's subtitle, "A Personal History," is accurate. There is much here of de Grazia's intellectual and even familial odyssey that will be of little interest to most readers, as will the material expounding quantavolution. One can readily criticize the author for assuming that his readers are interested, at this length, in his views and doings, particularly when he is something of a poseur. Thus he uses the device of writing of himself in the third person as "Deg," emphasizing the device by occasional use of "I" as the author of the book who is supposedly not Deg (for example, "Deg said—and I agree with him . . ."); he compounds that by incorporating some writing by Professor Joseph Grace, a historian of science, who turns out to be merely another pseudonym for Deg or de Grazia. Parts of the book reminded me of the film *My Dinner with André*—speculations and musings appropriate to the pub or coffeehouse but wearying to read at this length; few people, after all, have anything to say about cosmology or religion that still appears worth saying the next day. And in places Deg seems to reveal a touch of megalomania—implicitly when he presents himself as architect of the grand quantavolutionary synthesis, explicitly when he sees himself as superseding Velikovsky in that role.

Despite all that—which could be summarized by describing the book as self-indulgent—I found myself most of the time much in sympathy with its author. This is because he knows and acknowledges that he is a poseur and a day-dreamer, that he is fallible, and that it is his own choice to work at his avocation, cut off from the mainstream of academe and its support and funding. Moreover, there is often a fine choice of words, the turn of a new and cogent phrase, and a pleasantly mellow attitude. Finally, it is the case that de Grazia has been a successful social scientist and grantsman, and he displays an authentic understanding of many aspects of academe.

The practice of science, however, is not one of the aspects that he understands well. The misunderstandings of science exemplified in the Velikovsky Affair, and particularly by de Grazia and other supporters of Velikovsky, I have discussed at considerable length elsewhere (*Beyond Velikovsky: The History of a Public Controversy*, University of Illinois Press, 1984); so I shall venture only brief general criticisms here.

First, de Grazia does not understand how the content of science is generated, how difficult it is to make a new contribution in even a narrow speciality. Changes occur from the ground up, not by a direct altering of the Weltanschauung. The victory of uniformitarianism over catastrophism was not the result of a theological and metaphysical war. It was forced on science by the accumulating and converging progress of knowledge in many sub-specialities of geology, biology, paleontology, and radiochemistry. If the victory is to be reversed, it will result again from the accumulation of needs in many disciplines, not from the quantavolutionist claim that its world-view is superior.

Second, and not unrelated, de Grazia's understanding of science as a social

activity is ambiguous. On the one hand, he knows that scientists are human and that their activity displays the same human imperfections as does any other intellectual and social endeavor; on the other hand, he suppresses that knowledge when he maintains that science *ought to be* different. At heart, de Grazia is apparently an old-style positivist, believing that the true facts are out there to be discovered if only scientists will be truly empirical and open-minded. He regrets that inherent merit is not recognized, only the happenstance of achievement within the conventional wisdom—finessing the question. How and by whom might inherent merit be recognized and judged in the absence of generally acknowledged achievements? (Just so fallaciously does Chargaif feel that his “scientifically correct” approach to learning the structure of DNA was more worthy than the flamboyant and unprincipled assault by Crick and Watson, while the rest of the world knows that this is sour grapes only.)

De Grazia's main thrust in the Velikovsky Affair was to criticize the reception of new ideas by science, maintaining that this question could be discussed without reference to the substantive merits of those new ideas. He seems to take that view still, even though it is demonstrably untenable. Should science react to the idea of faster-than-light travel, or of teleportation, or of a flat earth, for example, as it reacts to the notion that fundamental particles have also wavelike properties? Many features of “new ideas” determine how they will be received, in particular how plausibly they fit with existing reliable knowledge. Velikovsky's notions about celestial events were and are most implausible; the evidence he adduced was not drawn from physics or astronomy or geology or any other relevant science; and so the manner in which his ideas were received tells us nothing in general about how science reacts to new ideas, only about how it reacts to poorly supported, implausible ideas ventured by one who has no standing in science.

Most of the interest of this book for most people will lie in its vignettes of Velikovsky and some of his supporters; and it is predictable that Velikovskians will be enraged. I myself, on the other hand, found it reassuring that de Grazia, from personal knowledge, attests the accuracy of some of the inferences I drew (in *Beyond Velikovsky*) only on the basis of the published literature. Some of the Velikovskians were simply camp followers, attracted to an enterprise that was anti-science, anti-establishment, and offered hope to some fundamentalists. (Robert Bass and C. J. Ransom, according to de Grazia, were or are creationists.) The schisms that I envisaged would develop strongly after Velikovsky's death were apparently already very strong before: Velikovsky's supporters “fought like alley-cats” among themselves. Lewis Greenberg, editor of the Velikovskian journal *Kronos*, would not permit the British deviationist journal to publish a paper delivered at a *Kronos*-sponsored conference, even though *Kronos* itself was not going to publish it because of its deviations from Velikovsky's dogma. Quite recently, *Kronos* refused to review de Grazia's quantarevolutionary *Chaos and Creation* and refused him access to its mailing list.

But most upsetting for the Velikovskians will be de Grazia's matter-of-fact discussion of Velikovsky's character. Velikovsky demanded absolute loyalty from his associates but did not always return the favor. He was not satisfied to be just in general the one who established the catastrophist viewpoint; he insisted that all his detailed ideas be accepted, and he banished those who had revisionist ideas: the founders of *Pensée* and the British Society for Interdisciplinary Studies, for example; and when de Grazia established a foundation intended to sponsor

Velikovskian studies, Velikovsky wanted its mission to be entirely restricted to pushing his own work. During the Velikovsky Affair, Velikovsky and his supporters claimed that he remained above the fray and eschewed polemics. De Grazia reveals that, in fact, Velikovsky orchestrated the controversy, using others to present his views and arguments. For instance, the letter in *Science* in the early 1960s that credited Velikovsky for accurate predictions was written at Velikovsky's instigation, and he supplied much of the actual content. Velikovsky was reluctant to recognize the contributions of others, refused to acknowledge his precursor catastrophists, and became depressed when, in 1940, he came upon Ignatius Donnelly's *Ragnarok* (whose approach and conclusions are so strikingly similar to those of Velikovsky's *Worlds in Collision*).

Velikovsky had an overwhelming need for recognition that could only be satisfied “by mobs of admirers . . . or . . . a great prize like the Nobel Prize. . . .” And in this search for acclaim and recognition, Velikovsky displayed a degree of intellectual dishonesty in “pretending to have supporters among the authorities who did not support him so strongly.” (De Grazia perpetrates similar offenses, it seems to me, in his dropping of such names as Paul Kurtz, for acknowledging that wrongs were done to Velikovsky, Stephen Jay Gould, as being a quantarevolutionist, and saying that Carl Sagan's “writings and utterances on occasion signify a suppressed readiness to accept general quantarevolution.”) De Grazia does not hang back from psychological explication of Velikovsky's character and behavior. He was intensely narcissistic, had paranoid tendencies, and exemplified the authoritarian character. De Grazia writes all this in a quiet, matter-of-fact manner, acknowledging these realities in a man who was de Grazia's friend and whom de Grazia respected for his intellectual powers, for the lucidity and originality of some of his insights; but it is predictable that the Velikovskians will be outraged, for they have not been prone to admit any human failings on Velikovsky's part.

De Grazia seems not to realize that his own account explains the furious reaction by some scientists in the 1950s to the widely publicized *Worlds in Collision*. Velikovsky presented himself as superseder of Darwin and Newton. He was waiting “for designation to the top rank of authorities.” The fuss was *not* caused by Velikovsky's suggestion of ideas that science could not countenance. It came about because Velikovsky wanted instant recognition as *the* authority on science when he had no standing in any science, no qualifications, had not paid his dues through recognized achievements, and presented his ideas in the form of a popularly published book rather than in technical articles. The absurd gap between Velikovsky's pretensions and ambitions on the one hand, and his lack of qualifications and evidence for his views on the other, could well explain the sarcastic outrage of some members of the scientific community. Even the much-criticized Watson, for example, was less brash than that. He merely wanted to win the Nobel Prize and went about it in correct fashion by working at a problem important enough to warrant such recognition—but he did not aim for “designation to the top rank of authorities” by exploding into the limelight of the popular media with claims that he had superseded Mendel and Morgan.

The Velikovsky Affair remains important, in my view. Not, however, because it exemplifies the resistance of science to new ideas, but because it illustrates how very wrong are the ideas of so many people about what science is, how it is carried on, how reliable are its findings. In fact, the media and the public have

serious misconceptions, the writers of popular science perpetrate significant errors, scientists themselves have a naive impression of what they are doing, and the humanists and social scientists have not yet presented an authentic and integrated historical, philosophical, sociological, psychological understanding of science and its relation to technology and the wider culture in which it flourishes. Such understanding is sorely needed—to make possible sensible science policy, for example. The Velikovsky Affair can serve to show at least that a massive task of education is called for. From the somewhat narrower perspective of *SI*, if we are not clear about what science is, then we also cannot be clear in our criticism of pseudoscience. •