

leaps into the whirlpool after his enemies is none other than Ra, the great sun god of Egypt. (The passage immediately following the leap into the whirlpool cited by Velikovsky reads: "Now the majesty of Seb appeared in the seat of the crocodile gods, of Sebek-Ra, of Shu, and of Osiris-Ra upon the throne of his father Shu as king of gods of men and all flesh, in heaven, earth, and the underworld, water, hills, winds, the ocean and the rocks. . . . Now the majesty of Seb said to the great cycle of nine gods who accompanied him . . ." and so on.) On such evidence, according to the Behavioral Scientist, Velikovsky has thrown the scientific world into "fear and trembling."

It is typical of Velikovsky's scholarship. He wished to prove that the great tenth plague, the slaughter of the firstborn of Egypt, actually described an earthquake caused by the approach of Venus. He theorizes that since the Hebrew words for "firstborn" and "chosen" are similar, there may have been a corruption in the text—the plague was an earthquake, the "chosen" (the aristocracy) of Egypt might have been killed when their fancy stone houses collapsed upon them, while the slaves, living in mud huts, survived. This interpretation, decides Velikovsky, is "obvious," for the Bible says that the Lord "smote the houses" of the Egyptians while passing over those of the Hebrews, which clearly implies an earthquake. Velikovsky reached this "obvious" interpretation despite the rather explicit language of the biblical account: "And it came to pass that at midnight the Lord smote all the firstborn in the land of Egypt, from the firstborn of Pharaoh that sat upon his throne unto the firstborn of the captive that was in the dungeon and all the firstborn of cattle."

Even the saints are not preserved against Velikovsky's scholarship. He cites St. Augustine's *City of God* as authority for his view that Minerva (who Velikovsky says represented the planet Venus) first appeared in the time of Moses. But the passage he cites says the opposite: that Minerva was "far more ancient."

So it goes in the world of Velikovsky's scholarship. When he cites records of astronomical observations,

Velikovsky simply ignores anything that conflicts with the interpretation he wishes to put on the records. He has a chapter arguing that before the seventh century a.c. the year was only 360 days long, consisting of twelve lunar months of thirty days each. But he forgets that earlier in the book he himself has quoted records that contradict that claim. His mistranslates passages from foreign authors, and offers the mistranslations as evidence for his theories. He describes records which he claims demonstrate that the appearance of the heavens has changed, but neglects to mention that the records date from periods 500 to 1,000 years after the change purportedly took place.

Velikovsky and his supporters seem to have an exceedingly vague notion of the size of a planet. If, in fact, either Venus or Mars had brushed up against the earth, and it is this supposition that is the heart of Velikovsky's theory, the planet would have appeared to grow larger and larger as day by day it came nearer to earth. Eventually it would appear to dwarf the sun and the moon. Yet Velikovsky gives no indication that he is surprised at the curious fact that no one noticed, that although he can cite all sorts of legends about floods and earthquakes and every sort of catastrophe, he can cite no description linking these events with what clearly would have been the most striking aspect of the encounter—the gradual growth of a speck among the stars until it became so large as to seem to cover the whole sky.

The Behavioral Scientist reports that its articles were read in advance by such well-known scholars as Professor Laswell of Yale, past president of the American Political Science Association; Moses Hadas, Jay Professor of Greek at Columbia; Salvador de Madariaga, of Oxford, and a number of others, all of whom encouraged publication. What is most surprising in this is not that there should be a revival in interest in Velikovsky, for in December 1962 Professors Motz of Columbia and Bargmann of Princeton published a letter in *Science*, arguing that in fairness to Velikovsky it should be noted that several predictions that he had made have since been confirmed. That alone, as Motz

and Bargmann suggested, provides sufficient grounds for taking a fresh look at Velikovsky, although it does not imply that the fresh look should necessarily reach any kinder judgment than the original. There is no shortage of science-fiction writers who can claim to have made some striking predictions, but no one is rushing to proclaim them all "savants of the age."

What is surprising in the Behavioral Scientist report is not that someone should question the outright rejection of Velikovsky, but the tone of the attack: the argument that Velikovsky's critics are driven by irrational "fear and trembling"; the frequency, and sometimes startlingly distorted summaries of the arguments offered by Velikovsky's critics, and the failure of the report to take notice of any flaws in Velikovsky's scholarship, to even consider the possibility that Velikovsky's work might have merited the ridicule it received. Most surprising of all is the suggestion that social scientists ought to rally to Velikovsky as a man who has demonstrated the power of the "methodology of social science."

Is the Behavioral Scientist seriously arguing that Velikovsky's methodology, of which a small but representative sampling has been presented here, provides grounds for defending Velikovsky?

The pages of the Behavioral Scientist report spill over with anger and passion, and good judgment quickly falls by the way. As noted earlier, it will be useful to keep this incident in mind, for example, the next time we hear questions of why it is that an impartial body of scholars is not set up to provide unbiased factual reports, which will then be universally accepted as the basis for discussion by all parties to political controversy. The problem is not that there are no objective facts, but that it is naive to suppose that on any issue that arouses passions—that is to say, on any significant public issue—scholars will not be found to support both sides. And faced with that choice of expert opinion, it is, of course, not easy for participants in the debate to resist the temptation to believe that the scholar who shares his approach is the man with the objective facts.