

The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe

Michael D. Gordin

[Download now](#)

[Read Online](#) 

The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe

Michael D. Gordin

The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe Michael D. Gordin
Properly analyzed, the collective mythological and religious writings of humanity reveal that around 1500 BC, a comet swept perilously close to Earth, triggering widespread natural disasters and threatening the destruction of all life before settling into solar orbit as Venus, our nearest planetary neighbor.

Sound implausible? Well, from 1950 until the late 1970s, a huge number of people begged to differ, as they devoured Immanuel Velikovsky's major best-seller, *Worlds in Collision*, insisting that perhaps this polymathic thinker held the key to a new science and a new history. Scientists, on the other hand, assaulted Velikovsky's book, his followers, and his press mercilessly from the get-go. In *The Pseudoscience Wars*, Michael D. Gordin resurrects the largely forgotten figure of Velikovsky and uses his strange career and surprisingly influential writings to explore the changing definitions of the line that separates legitimate scientific inquiry from what is deemed bunk, and to show how vital this question remains to us today. Drawing on a wealth of previously unpublished material from Velikovsky's personal archives, Gordin presents a behind-the-scenes history of the writer's career, from his initial burst of success through his growing influence on the counterculture, heated public battles with such luminaries as Carl Sagan, and eventual eclipse. Along the way, he offers fascinating glimpses into the histories and effects of other fringe doctrines, including creationism, Lysenkoism, parapsychology, and more—all of which have surprising connections to Velikovsky's theories.

Science today is hardly universally secure, and scientists seem themselves beset by critics, denialists, and those they label "pseudoscientists"—as seen all too clearly in battles over evolution and climate change. *The Pseudoscience Wars* simultaneously reveals the surprising Cold War roots of our contemporary dilemma and points readers to a different approach to drawing the line between knowledge and nonsense.

The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe Details

Date : Published September 26th 2012 by University of Chicago Press (first published September 17th 2012)

ISBN : 9780226304427

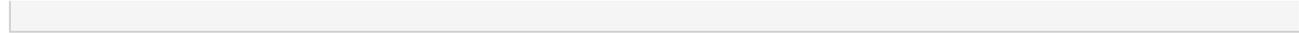
Author : Michael D. Gordin

Format : Hardcover 304 pages

Genre : Science, History, Nonfiction, Philosophy, Skepticism, History Of Science

 [Download The Pseudoscience Wars: Immanuel Velikovsky and the Bir ...pdf](#)

 [Read Online The Pseudoscience Wars: Immanuel Velikovsky and the B ...pdf](#)



Download and Read Free Online The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe Michael D. Gordin

From Reader Review The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe for online ebook

Tim Farley says

I remember back in the 70s, the heyday of New Age nonsense, that one of the wackier books out there was *Worlds in Collision* by Immanuel Velikovsky. I never read the book, but I was passingly familiar with the outline of his theory, which claims Venus didn't exist in far ancient times, but was expelled from Jupiter as a comet in historical times, and its passage by the Earth was the source of great historical catastrophes in history including the Great Flood.

Utter nonsense, right? Yup, there are about a million things wrong with this theory scientifically. Not only that, but to make his global catastrophe theory fit in with the historical documents he bases it on, Velikovsky has to surgically remove 600 years from Egyptian history, much to the chagrin of historians who have pretty good documentation that those 600 years actually did occur.

This book documents the reaction to the publication of the book, and how efforts to combat its ideas actually served to promote it and its creator. The book is exhaustively documented with hundreds of endnotes. (In fact, if you read it on Kindle the progress meter will only read 59% when you get to the end of the main text - the abbreviations, endnotes and index). If you want to know what the scientific/skeptical reaction to pseudoscience was like in the 1950s and 1960s, this is a great read.

The book focuses mainly on Velikovsky throughout, and documents his history mainly from the publication of *Worlds in Collision* to his death in 1979. But it covers significant details prior to and after that, and takes interesting side trips into other pseudoscientific topics such as Erich von Däniken's *Chariots of the Gods*, the creationists of the 1950s and 1960s and even the Sokal Hoax of the mid 1990s.

The author documents many aspects of battling pseudoscience of which skeptics are now well aware - for instance that overzealous combat can end up appearing to be suppression, that the politics of the time has a big effect on how science issues are perceived, and how cranks develop their own acolytes and adopt the trappings of science in order to court respect. I'm not sure I totally agree with one of the authors big conclusions - that the term "pseudoscience" itself is not a useful at all, except as a pejorative used against the enemy. He makes a good case for that, but I think he gives Velikovsky's "interdisciplinary research" more credit than it is due.

In any case, an excellent read for anyone interested in the history of Velikovsky and battles against pseudoscience, and the some 100 pages of notes and index are a valuable research guide for further reading on the topics.

Geert says

I read Velikovsky's *Worlds in Collision* when I was twelve. Since then, I've learned a lot about science and pseudoscience. I think I'm going to enjoy this book, which I first heard about on Seth Shostak's *Big Picture Science* podcast.

Steve says

I remember reading Immanuel Velikovsky's "Worlds in Collision" in the late 1960's and thinking it was great fun, what with planets bouncing around the solar system like billiard balls, and all sorts of interesting old myths, including the Exodus, explained by the emanations from comets. I also found ZAP Comix and Lord of the Rings great fun also about that time, but I no more thought they were science than was "Worlds in Collision." However, many others took it more seriously, positive and negative. This book examined the Velikovsky phenomenon as an episode in the history of science and American cultural history. The author had access to Velikovsky's papers, and there was some interesting material there and a useful interpretation, but I do feel that this book, like many non-fiction books these days was really an article that got stretched.

Brendan F says

A detailed historical overview of the debates over Velikovsky's work, with some fascinating parallels and connections drawn with the episodes of postwar eugenics, Lysenkoism, and young earth creationism.

Unfortunately, the emphasis on historical reporting keeps the book from taking the philosophical issue of demarcating science from pseudoscience sufficiently seriously. Gordin concludes that pseudoscience is an imitation of science, one that even "goes all the way down" to including the very idea of demarcation. But this treats demarcation as merely a behavior, a sociological or historical fact, a tendency to claim authority for one's self or one's ideas. It seems to ignore the possibility that there are true standards or norms governing the scientific pursuit of knowledge, and that it is the adherence to or violation of these standards that demarcates science from pseudoscience. Attempting to discover, articulate, and promulgate such standards would be something we could do about pseudoscience, contra the author's pessimistic claim in the conclusion that there is "nothing" that will provide a "magic solution" to the problem (as though any solution would necessarily be simply "magic"). Gordin also suggests that the idea of demarcation is a tool used by right wing "denialists" to legitimate their crass apologetics for planet or health destroying industries. That struck me as pretty hackish.

Notwithstanding these shortcomings in the book's conclusion, the book is a well researched documentation of some very fascinating episodes in the history of science and is well worth reading on that account.

Mark says

This is a terrific book on the history of the controversy over psychiatrist and psychoanalyst Immanuel Velikovsky's writings about ancient history and cosmology. Largely forgotten since his death in 1979, Velikovsky's work was once quite well-known and extremely popular almost right from the publication of his first book "Worlds in Collision" in 1950. He claimed that about 3500 years ago, a comet emerged from Jupiter and circled the Earth, depositing petroleum, and causing major catastrophes over the Earth, which are described in detail in the Old Testament, before eventually settling in orbit around the sun as Venus, and that the human race had collective amnesia from the trauma and forgot any of this had occurred, explaining that he based all this on careful analysis of ancient texts. He seemed to have been provoked by one of Freud's books, which attempted to psychoanalyze Moses, putting the historical legitimacy of the Old Testament in

doubt. The implication for me was that he made something up to justify his Biblical literalism, and was ignorant of the both scientific impossibility of what he was describing and how much he was projecting onto the texts, and used whatever authority he had through his credentials as a psychoanalyst to explain away questions about why no one in the human race had ever recorded or described these events.

The author Michael D. Gordin starts off the book discussing the nature of pseudo-science and why the "demarcation problem", or giving a clear philosophical definition of the difference between real science and pseudo-science, is so difficult. This is a wise move that prevents him from having to defend or criticize Velikovsky's work, so he can just concentrate on the history of the controversy over the work and the events that unfolded.

Right from the beginning there was controversy over Velikovsky's writing. The controversy and push back from the scientific community was seen as a deliberate attempt at suppression, which gave Velikovsky more credibility than he really deserved and had the effect of giving Velikovsky the notoriety he wanted, turning his books into bestsellers.

Gordin describes the lively history well. The scientific community was still reeling from Soviet genetics being taken over by a charlatan who got real researchers purged and discredited, setting back research in the Soviet Union significantly. In that context, what seemed like an overreaction from scientists makes sense. But it's only the first chapter in Velikovsky's desperate search for credibility and legitimacy, which includes a friendship with Einstein, brief interaction with Creationists, some adulation from the counter-culture of the 1960s (which he despised), the occasional public debate (which always ended in disaster), and some attempts by true believers to start foundations to support and promote Velikovsky's work (which always failed because Velikovsky was a control freak).

The author has sympathy and real affection for Velikovsky, but doesn't shy away from unflattering descriptions of his behavior or writing. The only place I disagree with him is in the analysis in the last chapter. He dismisses criticism of pseudo-science and pseudo-scientists because he sees them as essentially harmless people with little real influence, ultimately. Given the enormous popularity of New Age gurus like Deepak Chopra, who make tons of cash off the backs of their audiences by peddling concoctions of pseudo-science and spirituality, I have to disagree with his assessment. But given how he does talk about the dangers of the work of legitimate scientists who deliberately undermine the ideas of scientific inquiry and consensus to serve corporate interests, I have to wonder why he doesn't make the connection.

February Four says

Honestly, I was looking for something not quite so focused on Velikovsky and more focused on how pseudoscience lives on even as scientists debunk and dismiss it. This book delivered a detailed history of what came across as high-stakes social drama centered around Velikovsky, but not much else beyond. Nice in the "he-said, she-said" department (mostly "he", few women) but too narrowly focused to merit its title.

Daniel Cunningham says

I really liked this book.

When I read the dust cover the name Velikovsky rang some dim bell, and the description of Venus almost hitting Earth sounded only just a bit more familiar. Perhaps not surprising: I was born in 1978 and so missed almost all of this whole multi-decade saga, but I did catch paperbacks and articles, probably in the late 80's, still responding to this.

I found this retelling, including the 'strictly historical' aspects and the more generalizable aspects, quite a good read. I think the author chose well in using a recent (and still somewhat ongoing) episode like Velikovsky, but one that does not have much potential turn people off immediately -as a critical examination of creationism, ghost hunters, vaccination, astrology, etc. might very well do. That said, reading this really made me start to think about some of those current issues and events, including popular attempts to promote science, to fight pseudoscience, and to fight straight up superstition. It made me consider, not entirely for the first time, the role of scientists as 'elites' and how that is viewed by a culture that distrusts authority (from teenagers to tea-partiers.) And it made me consider, again not entirely for the first time, the tactics and attitude of atheists who debate religious believers.

As the book wraps up with, there is no one answer to dealing with all these issues and questions. I certainly don't have any answers :) But it has got me re-thinking the value of non-engagement as a tactic (i.e. on the web, often known as "Don't feed the trolls") as well as just how (non?) dangerous -at least in the long term- the seemingly normal, periodic "BS of the decade" might actually be. Accusations of devil worship/sexual abuse surely ruined a lot of lives in the 90's (or wsa that 80's?), but it hasn't had much lasting, large scale impact (again, acknowledging that it destroyed individual lives.) Perhaps the antivax 'movement' will run its course too (with the "requisite" number of harmed children, of course... these things do, again, affect individual lives.) And surely a few more years of "Ghost Hunters" is all that can left... surely... hopefully... Right?

No answers, but a very good read. :)

Raughley Nuzzi says

This was a great study of what is "pseudoscience" and how it is received by the public and the scientific community. It uses Immanuel Velikovsky's [i]Worlds in Collision[/i] as a fascinating case study of this phenomenon. Coming on the heels of Soviet Lysenkoism and American McCarthyism, Velikovsky's work was fervently rejected by the scientific community. The claims he laid out are worth rejecting, but the manner in which academia attacked him ultimately amplified his work.

The book was very well written and painted a clear picture of Velikovsky as the king of his own domain, exercising the same type of editorial authority over his adherents as he so resented among the scientific community. The book doesn't aim to counter Velikovsky's historical or scientific claims (passing it off by saying, "Innumerable books have already done so") nor does it attempt to offer a "solution" to pseudoscience, but it asks a lot of interesting questions and encourages the reader to use critical thinking and an open mind when analyzing purported works of science or pseudoscience. After all, it says, as long as Science exists, pseudoscience will follow as its shadow.

Richard says

Very interesting in how Gordin connects the fight for scientific orthodoxy with political considerations, although it is not the main focus of the book and more could be said. Think you know what pseudoscience is and how to spot it? Consider the exposition of the subject in this book. On the other hand, it felt a bit more like a hardy appetizer than an entree.

Daniel DeLappe says

Good book. Kind of a thick read, but worth the time. Amazing how the religious leaders jumped on this bandwagon. It is amazing how long the creation science has been kicking around. Great writing. No wasted paragraphs. Everything to the interesting point.

Vince says

I really enjoyed this book. There is a lot of information packed in its 200 pages (plus 100 pages of end notes and index).

What you won't find is a debunking of Velikovsky's delightfully strange theories. The truth or falsity of his ideas is only addressed incidentally. A lot of skeptics will be potentially interested in this book, so I'll also mention that skeptics like Carl Sagan and Martin Gardner are mentioned but don't play a prominent role. An examination of other fringe sciences is limited to those with a connection to Velikovsky; he is the focus.

What you do get is a history of all the phases of Velikovsky's work from the conception of Worlds in Collision as reaction to Freud, through trying to gain legitimacy by befriending the likes of Albert Einstein, to a certain level of fame and the policing of his disciples that came with it. You also get a look at the reaction of the scientific community and the social and political background that led to it. Finally you get to see some of the explicit links between Velikovsky and some fringe ideas that are still around today like flood geology.

The history is sandwiched between an introduction and conclusion that tries to situate it in the broader context of what distinguishes science from pseudoscience. His stance is that there is no clear dividing line and what distinguishes the two is largely authority. It isn't an unreasonable thesis, but I think he needs a little more than just the one case study, Velikovsky, to consider it established. I'm not completely convinced there isn't a little more to it than that, but he brings with him a philosopher's love of necessary and sufficient conditions and a dislike of fuzzy boundaries. Still it is no reason to downgrade this interesting and thoughtful book.

I think anyone interested in pseudoscience or cultural history would enjoy this book.

Eric Wojciechowski says

Even before the 1950 publication of "Worlds in Collision", members of the scientific community exploded in outrage over Macmillan choosing to publish it. It wasn't that they wished suppression or censorship of Velikovsky and his young Venus come Exodus story. It was the outrage that a publisher like Macmillan, known for publishing science books, would put "World in Collision" on the same shelf as science. The

uproar and boycott threats caused Macmillan to drop a very profitable title and give it to another outlet which continued to makes gobs of money with it.

But that wasn't the end, Velikovsky and his work would continue and bring defenders to his theory (although he refused to call his revision of history a "theory"). This culminated in the 1974 meeting of the AAAS which included Carl Sagan to rebut him once and for all. But the meeting was unproductive and it was just a matter of time, about two more decades, before Velikovsky and his last champions were forgotten. But not entirely.

"The Pseudoscience Wars" is a must read for anyone delving into, well, Pseudoscience. And may I add, even if you're just a scientist or seeker of reality and truth, you should read this. It's a cautionary tale on how to approach strange theories and revisionist history. The Velikovsky Affair was the first of it's kind but I doubt will be the last. After all, as I write this review, isn't the History Channel still running with their "Ancient Aliens"?

Katy says

Interesting.

Miranda says

Wish there was more focus on fringe science generally. This is more a deep case study that illuminates the culture of science and authority.

Maurice Williams says

Who hasn't heard of Immanuel Velikovsky, the man who rocked the scientific world with his claim that Venus was once a large comet that zoomed close enough to Earth that its gravitational attraction caused the events of the Exodus? I was a young kid when I read his book: "Worlds in Collision" in 1951. I was fresh out of high school and not very well grounded in science, but I knew the stories in the Bible.

His book intrigued me because it lent credence to the Bible whereas science at that time did not view the Bible as historical. In high school I learned that the solar system is like a watch that once wound just goes on year after year in a steady and predictable fashion. And there is no archaeological evidence supporting the history of the Hebrew people recounted in the Bible. I next read Velikovsky "Ages in Chaos;" eventually I read all of Velikovsky's books.

I would up with a life-long interest in Velikovsky and science and history. Today, I'm not an expert in any of these fields but I know a lot more than I knew when I was twenty-one. Velikovsky, I think, was treated harshly by the scientific community, but I did not know many of the details. Michael D. Gordin has provided a wealth of information about Immanuel Velikovsky and his impact the American culture and on the scientific community.

But in my old age, I can see some flaws in Gordin's portrayal of Velikovsky and in what the scientific

community did to Velikovsky. Velikovsky was interested in history and wondered why biblical history was considered myths not supported by archaeological evidence. He saw a possible solution to this when he read the papyrus of Ipawur. He thought the papyrus of Ipawur was written by an Egyptian who witnessed the plagues of the Exodus. That led him to believe that the Exodus can be placed in the time when Ipawur was alive, indicating that the Exodus had been placed in the wrong time period by scholars in 1940.

He figured that some events the Israelite people experienced during Old Testament times appear to be caused by extra-terrestrial influence of Mars and Venus travelling in erratic orbits, which occasionally brought them close to the earth. From there, Velikovsky searched records of nearby neighbors to the Jews to see if they recorded activity of these planets in a similar fashion. He found that the Romans and the Greeks reported battles on Earth involving Jupiter, Mars, and Venus viewing the same planets we see but interpreting what they saw as battles between gods with the same names as these planets. He found other civilizations distant from the Middle East like China and Mexico that also saw similar events in the sky and reported the same erratic motion of these planets.

In his third book, "Earth in Upheaval," Velikovsky did not cite historical writings or positions of the planets: he instead reported on catastrophes that left their marks on the Earth. He felt these warranted a reconsideration of the theory of uniformitarianism which holds that the surface of the Earth changes very slowly over a matter of many millions of years. He argued that the Earth at times suffered sudden catastrophes that left dead mammoths with food still in their stomachs; buried piles of broken bones and shattered trees; layers of sedimentary rock that are vertical mixed in with layers that are horizontal (some of them upside down) all of which can be found in many places on Earth. We all know that collisions have occurred in the past: meteor crater in Flagstaff, Arizona; Popigai crater in Siberia; Chicxulub crater in Yucatàn peninsula plus all planets and moons without an atmosphere show multiple craters.

Velikovsky urged scientists to pay attention to the events he described and reconsider their understanding of celestial mechanics and historical timeline of history to base their theories more closely upon historical events. His main point was that science should not ignore historical events that contradict the laws they have deduced. His arguments were threefold (1) There were physical upheavals of a global character in historic times (2) These catastrophes were caused by extraterrestrial events and (3) These events can be identified.

Velikovsky tried to re-explain celestial mechanics to support what ancient observers saw the planets do. From his speculation, he opined: (1) that the surface of Venus is much hotter than scientists presume – like 800 °F; the atmosphere of Venus contains hydrocarbons; that Jupiter emits radio noises; and that planets have electrical potential that can discharge if planets get too close to each other. Surprisingly, these predictions turned out to be correct when the space age began.

When Velikovsky launched his first book, he was met with intense resistance from the scientific community. I remember it. Scientists forced Macmillan to quit publishing the book when it was already a best seller. To save themselves from a boycott (many books used as text books were printed by Macmillan), Macmillan transferred publishing rights to Doubleday. What the scientific community then tried to do was misconstrue Velikovsky's arguments to make them appear to be pseudo-science. Gordin wrote a whole chapter comparing Velikovsky to Trofim Denisovich Lysenko, a Russian botanist who championed a miscalculation of natural botanical laws that caused havoc in the Soviet Union, but Velikovsky had no part in the teaching of Lysenko. I think it was unfair for the scientific community to push Velikovsky into similarity with a known pseudo-science only to more easily discredit Velikovsky.

Gordin described pretty much everything that happened in Velikovsky's confrontation by scientists. I notice then, and I see it in Gordin's book, that the scientific community never took Velikovsky seriously when all

he wanted was for them to re-evaluate their position on celestial mechanics and biblical history. Instead, they focused only on Velikovsky's attempt to redefine celestial mechanics. They called it pseudo-science and ridiculed his attempts. Velikovsky was not a trained astronomer: he was a self-taught amateur, but I think he did a marvelous job pointing out deficiencies in current celestial mechanics that do not explain what people all over the Earth had been seeing during recorded history.

Besides opposing Velikovsky for his attempt to explain how celestial mechanics could better portray what ancient observers saw in the heavens, the scientific community dismissed Velikovsky's historical record of observations by many cultures as myths and pseudoscience. Cecilia Payne Gaposchkin wrote three critical reviews of *Worlds in Collision*. In her third review, she said her problem was not with astronomy but with the historical sources Velikovsky cited. She claimed that Velikovsky not only quoted historical sources, but he said what they meant. Walter S. Adams of Caltech said he cannot help feeling that Velikovsky has overstated the value of his material (historical sources) as evidence. Primitive people in small countries, with little or no means of outside communication are, like children, prone to exaggeration.

The scientific community would not take Velikovsky seriously, even as Velikovsky quickly gathered a huge readership that thought he was right on track (myself included). I think the problem was that Velikovsky was not an accredited physical scientist. He was an amateur bursting into the domain of accredited scientists implying that the scientific community and historians were wrong in claiming that there is no confirmation for the Exodus or for biblical history. The accepted dates for biblical history do not agree with accepted dates for Egyptian history or for the history of any neighboring country. Velikovsky argued that secular history is out of sequence with biblical history by 600 years. Forty-seven years later, I read "Pharaohs and Kings" by David Rohl, a well-qualified Egyptologist, who also found discrepancies in agreement of the historical timelines for Egypt and Israel. He showed evidence that the timelines were out of sync by 200 years.

Velikovsky's critics argued that the Bible is based on myth. But they went further; Gordin included a list of recognized pseudo-sciences held by many Americans. He explained that anyone who believes in any of those pseudo-sciences is considered as belonging to the lunatic fringe. One of the listed pseudo-sciences is creationism. What! I happen to be convinced that God made a public revelation to mankind through Moses in which, among other things, he revealed that he did indeed create the world. I didn't come by this conviction by my own perception. I think God's revelation is true; that's why I believe it. This puts a whole different slant on my book review.

Gordin mentions Carl Sagan, America's most popular astronomer. I am familiar with Carl Sagan and his interaction with Velikovsky. I read Sagan's book "Cosmos" and I own the DVD collection of the same title. In both the book and the DVD, Sagan professes his unbelief in God. On The Internet he expresses it more clearly. He is quoted on The Internet as saying:

"I would love to believe that when I die I will live again, that some thinking, feeling, remembering part of me will continue. But much as I want to believe that, and despite the ancient and worldwide cultural traditions that assert an afterlife, I know of nothing to suggest that it is more than wishful thinking. The world is so exquisite with so much love and moral depth, that there is no reason to deceive ourselves with pretty stories for which there's little good evidence. Far better it seems to me, in our vulnerability, is to look death in the eye and to be grateful every day for the brief but magnificent opportunity that life provides."

I don't want to criticize Sagan for what he chooses to believe. He is free to believe anything he wants. But I think he is mistaken. It seems counter intuitive to me to presume that God does not exist. The world is too complex with too many organisms depending on a synergistic relationship between different species for me to presume that all this just happened with no God nor any intelligence behind it. I think evolution can easily

explain how God created the world, but I don't see how it proves that God does not exist. God not only created the physical universe, which does exhibit a progressive level of change through time, but God also created the physical laws that govern the universe. These laws are unchanging and they apply throughout the universe. If there were no creator and evolution holds sway over the entire universe: how is it that the laws governing the universe are fixed and stable throughout the universe and for all time?

Carl Sagan says in his book "Cosmos:" "The cosmos is all there is, all there ever was, and all there ever will be." This is similar to the claims of Christianity: "God is. He always was, and always will be." My acceptance of the revelation attributed to God through faith convinces me that this is absolutely true for God. He is eternal. He always existed and will exist forever. But the cosmos Sagan is talking about is evolving. It came into being about 13.8 billion years ago. It is expanding and is headed for dissipation some billions of years in the future. Even Sagan himself will dissipate into nothingness after he dies.

Sagan brought up his concept of The Encyclopedia Galactica. He speculates to posit undiscovered alien civilizations throughout the universe, even though there are no credible facts to support his speculation. He writes: "extraordinary claims require extraordinary evidence." Yet he speculates that there must be hundreds of alien civilizations, even spending a whole chapter, and a whole episode in his DVD, cataloging the Encyclopedia Galactica, in which he presents a lot of detail on a catalog of all (possible) intergalactic civilizations, which he claims will be discovered through radio telescopes (even though we have not received a single message from them today twenty-three years after his death).

There is something very similar to the Encyclopedia Galactica in the Christian mentality, the presumption that every human demonstrates, in real time, the history of how he, during his earthly life, responded to God, and that history is remembered in the next life. No human becomes extinct! We all will exist forever, some in unimaginable joy in God's heavenly kingdom with others not so joyful realizing that their refusal to submit themselves entirely to God's holy will carries a heavy price. God actually can be considered as the librarian of this Book of Life.

From my own perception, I think human are connected to two worlds: the physical world and the spiritual world. We can easily examine the physical world, but we cannot examine the spiritual world. Those who argue against the existence of the spiritual world cannot explain the enormous difference between human beings and anthropoid apes. No species of ape has ever developed language as humans have done. No ape cooks its food or fashions clothes to be worn or shows any sign of believe in a supreme God. But all races of humans do. Some of the most massive constructions by human beings are places of worship, like Stonehenge, the Pantheon, and other ancient sites of worship. I think it is obvious that all races of humans recognize a spiritual world no matter how primitive those races are. This comes through their spiritual nature.

God is manifested in the spiritual world. His revelation teaches that he created the entire physical and spiritual world and why he created everything and why there is so much grief and defiance against his will in the world. A supremely gifted angel was granted free will just like we humans and all the other angels have, but that angel, Lucifer, chose not to obey. Instead, he chose to take over the universe and all human beings for himself. He rebelled and brought darkness into creation. If one does not believe Genesis, one will never understand why God created the world as it is and what God expects from all of us.

I have believed the Christian message most of my life. It's not something that I think is true simply because I believe it. It's quite the opposite. First, I became convinced that the Christian Gospel is authentic: that's why I believe it. The only way we can approach God is to believe his revelation. He started his revelation to Moses and had Moses record that early part of his revelation in the Torah, the first five books of the Hebrew

Bible. The Torah is the accepted as the beginning source of God's revelation by three major religions in the world: Judaism, Christianity and Islam.

Incidentally, almost everything that we hold to be true is actually believed through faith in the accuracy of the person we hear it from. Few of us have the training or the equipment to examine for ourselves what others tell us. Are there billions of galaxies in the universe? How would I confirm that? I don't have access to a powerful telescope, and I don't understand celestial mechanics well enough to determine what other tell me is true science or pseudo-science. I can either choose to believe what they tell me or refuse to believe. It's the same with almost everything I accept as true. And some of the opinions I can confirm with my own eyes might not be as they look. I can see the sun rise in the morning and set in the evening, but through faith in the testimony of scientists I have become convinced that it's not the sun that moves; it's the Earth that revolves.

Even though there is only one God, and one revelation, there are many different understanding of it. This is a big problem, probably why scientists call creationism pseudo-science. The world is full of conflict and contention, strife and fighting. It comes from Lucifer's darkness. God's revelations reveals why that is so. Lucifer, whom God created to be the bright morning star to illumine the minds of lesser gifted angels and humans rebelled against God and decided to go his own way and take captive the whole human race to serve him instead of God. His rebellion influencing human beings is what God's revelation calls "darkness." I do believe this, and I recognize that many human beings, even those who consider themselves Christian, do not believe it as I do. In trying to display their faith in God, they actually distort the faith, and justify others in their unbelief. God created each one of us to serve him because he wants for each one of us to share in his happiness. He put us into this mess on earth to combat the influence of Lucifer and make it possible for God's will to be done on earth as it is done in heaven. God wants all Christians to spread his revelation to others. It seems impossible because of the incredible of darkness in the world, but bearing witness to his Gospel is what God wants.

Since the time of Velikovsky, scientists have begun to write about catastrophes: D. S. Allen, B. Sc., a science historian specializing in paleogeography wrote "Cataclysm" in 1997 describing Phaeton that broke off from the exploding super nova "Vela" and entered our solar system around 9500 B.C. and caused havoc in our solar system.

A recent book, "The Cycle of Cosmic Catastrophes," by Richard Firestone, Ph.D. a nuclear physicist, argues that 41,000 years ago a distant star exploded into a super nova. A shock wave of radiation reached the Earth and caused a mass extinction of most life exposed to the radiation. Another shock wave of large particle-size debris arrived 16,000 years ago bringing a huge dust cloud hurtling in at 70,000 miles per hour followed by larger particles which erupted into huge fireballs when they struck the earth causing a huge blast of super-heated air traveling at more than 1000 miles per hour uprooting trees and ripping rocks from mountain sides.

It looks like Velikovsky's influence is still operating in the American culture. There is an immense number of Americans who are convinced that God did, indeed, create the universe. If any of them are Christian, they all will feel bound by Christ's command to let their lives bear witness to him and try to spread belief in his Gospel to the whole world. So, even though the scientific establishment beat Velikovsky down so thoroughly that few persons under fifty years of age have even heard of him, and his name is no longer cited in serious books by accredited scientists, His memory is still encouraging Americans scientists to reconsider their conviction that creationism is pseudo-science. I don't think the scientific community will ever be rid of the influence of creationism, no matter how much they try to marginalize it.

Velikovsky believed that the creator selected the Israelite people to be his people from whom the creator will raise up a savior for all humans. When Egypt placed this people under slavery, God had Moses warn the

rulers of that nation to release God's chosen people. When they steadfastly refused, God punished Egypt and its rulers and their gods severely. The selection of the Israelite people and their release from Egypt are cornerstones of God's revelation of his plan to save the human race lost in bondage because of the rebellion by Lucifer. This revelation is something I think every human being should accept as true. I think God is serious about this, and I, for one, don't want to spend the rest of my life ignoring it.

So, what is my opinion of Velikovsky? I think Velikovsky was gifted with extraordinary intelligence. I enjoyed and learned a lot from reading his books. He wanted the scientific community to reconsider their rejection of creationism as pseudo-science, but he failed. I admired him all my life, and was saddened to see him silenced by the scientific community.
