

Alfred de Grazia

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

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This book is dedicated
to whoever figures in it,
whether or not by name.

The most elementary books of science betrayed the inadequacy of old implements of thought. Chapter after chapter closed with phrases such as one never met in older literature: "The cause of this phenomenon is not understood;" "science no longer ventures to explain causes;" "the first step towards a causal explanation still remains to be taken;" "opinions are very much divided;" "in spite of the contradictions involved;" "science gets on only by adopting different theories, sometimes contradictory." Evidently the new American would need to think in contradictions, and instead of Kant's famous four antinomies, the new universe would know no law that could not be proved by its anti-law.

To educate — one's self to begin with — had been the effort of one's life for sixty years; and the difficulties of education had gone on doubling with the coal-output, until the prospect of waiting another ten years, in order to face a seventh doubling of complexities, allured one's imagination but slightly.

Henry Adams

From: *The Education of Henry Adams: An Autobiography*. Privately published in 1906, in 100 copies, and sent to interested persons for comment. General publication ensued in 1918. In 1975 republished by Berg: Dunwoody, Georgia.

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IN SEARCH OF TIMES PAST

I did not obtain Alfred de Grazia's materials for this book without remonstrance and persiflage. I had thought that he would be pleased to have someone writing about his activities, especially someone like myself who could be counted upon for sympathy. Rather not! He said that he was quite capable of writing his own autobiography, and indeed intended to do so, in several volumes, no less. Strange, for Immanuel Velikovsky had responded to me in the same way!

When I muttered something about reminiscence and the consolations of old age, he was primed for the retort, and I learned that Leonard Woolf had written *his* autobiography in his eighties, in five volumes, and Woolf was then old enough to be his father, and Bertrand Russell at the same age in three volumes. And I had better read them.

Furthermore, said he, I have a lot to recount, think of it, a boyhood spent sniffing the stench of the Chicago stockyards, shivering in the icy blasts off the prairies, a small critter's glance up the skirts of the Roaring Twenties. Then the University of Chicago in the heyday of Robert Maynard Hutchins. And more, seven campaigns of World War II, and still more, an island of the Aegean Sea, an experimental college in the Swiss Alps, intelligent women, singular, even beautiful, women, even beautiful men, for that matter. No, I can't let you take it away, there's too much to say.

Let me try, I said, there'll be no conflict of interest. I'll hew to the line of the Cosmic Heretics as they tried to break into the halls of science. It's got to be dull. It'll save you doing the chore. I can't take in your *enfants terribles* or your politiking, your love affairs or your friends who escaped your involvement in cosmic heresies. Or your poetry or attempts at educational revolution. No Naxos, not the beautiful ideas by half. No grueling trips, failures, pains, unless they're cosmical. No Vietnam, no University life.

Then Deg began to reproach me for taking a person's life out of its context, arguing that you have to talk about everything to say the truth about anything, whereupon I argued that no field of science could exist if most of everything weren't left out of the investigation of a single thing.

Well certainly, he granted, you'll have a better chance of excising the insignificant details of life. Yes, exactly, I said, but I thought there's the problem and the genius of biography, fixing upon the detail which may be the fulcrum of a change of life, precisely the sort of thing that is often lost in sociology and history.

Where will it start, where will it end, he wondered. I'll start, I said, at the time when you met Immanuel Velikovsky, the beginning of 1963, and carry it down to the publication of your *Quantavolution Series*, that is, the beginning of 1984. Not in chronological order of course. The story will lurch from side to side and pitch and roll.

Using your iconoclastic word "quantavolution" will help to define the *dramatis personae*. If a person's been observed by you amidst the mêlée provoked by the claim that nature and mankind have been fashioned by disaster, then that person belongs to the cast of characters.

Deg told me that the cosmic heretics were many, and their number would grow with the acceptance of the heresy. But, he warned me, if the heresy were to fail, I would be guilty of slandering decent citizens by inclusion. In either event, he said, history will be rewritten; it always is.

To whom will you dedicate your book, he asked, which was tantamount to giving his blessing to the project. To the Cosmic Heretics, naturally, I answered. O.K.; anyhow I've already taken care of Velikovsky with a dedication of my first book in the field. V. died four years ago, seventeen years after we met, and before we met had done almost all of his writing. For my own part, previously I had done a lot in political behavior and methodology, but nothing that might be called quantavolution. It was a sociological problem that brought us together in the first instance — the "reception system of science," I called it afterwards. Although I might have known better, I almost immediately entered into the substantive theory of catastrophe; I couldn't resist the challenge.

And I am just about finished now. (I grinned, and so did he.) I'm beginning to repeat myself, too, so it's not a bad time to end your book. By the way, have you read everything that I've ever written? Yes, of course. Just wondering, he mused, because V. tried never to talk to a person about his works who hadn't read the pertinent volumes. It makes sense and saved his time.

I don't feel strongly about it: my books are children who have gone off somewhere, on their own responsibility. I don't possess them, though I ask that they not be mistreated — the same as I would for other people's children. Who is entirely read, anyhow, he asked of me almost angrily, as if I had raised the subject.

I said I didn't know. Once I had met a psychologist who had read the 24

volumes of Freud's collected works. Still, commented Deg, some of his pieces escaped the Hogarth Press. William Yeats dedicated his autobiography "to those few people mainly personal friends who have read all that I have written," but probably noone qualified. It's good that nobody has read everything of anybody. It might abet the idea that where the pen stops the person vanishes. Rather, although the powers of expression tower above life, life rampages uncontrollably below.

PART ONE

CHAPTER ONE

ROYAL INCEST

Alfred de Grazia was entering his forty-fourth year when he met a self-styled cosmic heretic, Immanuel Velikovsky, who was already sixty-seven, and for the next twenty years a wide band of life's spectrum was colored by their relationship. As with a love affair, all that happened in the beginning presaged what would happen later, stretched out on the scale of time, themes doubling back upon themselves, attractions and reservations never to be erased, continuing accumulations.

The men changed, the world of science changed, too, and also the political world, yet this latter less; for, after all, one man died and the other grew old, whereas science and politics, those statistical behemoths of collective behavior, go on forever, compounded of many millions of individuals whose average age hardly varies, exhibiting trends whose progress, if it could be called such, is hardly discernible and might indeed have constituted a regression. At least so it seemed to these two men who were trying to affect the science and politics of their time.

Velikovsky died a heretic, with scattered generally unfavorable press, while his friend de Grazia moved on with a spirit that could be called existential, convinced as before that politics (and he insisted upon regarding science, too, as politics and often included politics in psychopathology) — that politics, although probably irredeemable, was the elemental hydrogen of human behavior, no matter how compounded into life styles.

As the winter days of 1962 became 1963 in Princeton, New Jersey, 08540 U.S.A., families and friends gathered into clusters like the last of the leaves, so that half-consciously and driven by eddies of customs and calendar, de Grazia saw more of his friends like Livio Catullus Stecchini and of his brother Sebastian. He did not know Velikovsky, and if he had been asked about him, he would have replied that he had never heard of him.

This may appear strange, considering that Deg was to be numbered, by whatever scales a social psychologist might invent to distinguish the "informed and involved" from the "ignorant and apathetic," as a high-scorer on information and involvement. He had enough children in the Princeton school system, a half-dozen, to catch the sound of names from all quarters. He spent part of each week in New York City and at Greenwich Village where, of all places, the name of Velikovsky might have been bruited about. He had since 1957 published and edited a magazine, the *American Behavioral Scientist*, which pretended to cover those matters that were or should be the concern of social scientists. He personally scanned a hundred-and-fifty magazines in the social sciences and current affairs each month. He had many students, several of them close friends. His parents and the families of two brothers were living most of the time at Princeton.

He was not socially pretentious, nor a prideful man, not a University snob, and had had to pawn his professional reputation several times on behalf of scholarly and political iconoclasm. Withal, when it came down to it, he claimed that he had never heard of a man about whom a million or more Americans could have delivered him a rancorous account. One feature that makes mass society a horror-show is the actual anonymity of the famous. (However, the mass scatoma of social realities may be a worse feature.)

This he confessed when Livio Stecchini, as they walked along Nassau Street on that cold day, brought up the matter, disjointedly, as happens with men walking down the street to no end, intellectuals with minds chock-full of oddly related and far-off affairs, old friends whose thoughts needed no introduction nor conclusion. Knowing the two men, I imagine that their conversation would have gone something like this:

"There is a man in Princeton with good material on the scientific establishment... Cosmogonist ... They suppressed his books."

"What do you mean, suppressed his books?"

"They smeared him."

"Like Reich? Like Semmelweis?"

"Yes."

"What does he do?"

"He lives here. He writes."

"About what?"

"Mythology, astronomy, the Bible, ancient catastrophes."

"What does he live on?"

"His books. They are very well sold."

"That's not our topic."

"No. The ABS could take up the sociological side. It's rich."

Deg was skeptical. Although his *American Behavioral Scientist* would

stop at nothing, every scientist had his one or two little scandals of defamation, every professor his Dean's secret crime, his edgy paranoia, and you had to take his word for it. It was the same in politics, dirty tricks everywhere and defamation as a matter of course. As for the juggernaut of science, it rolled along smashing unconscionably the god's celebrants who crowded in upon it from all sides with fresh ideas and reputations.

"His materials are rich." Again that remark.

"Really?"

"I can introduce you. We can go to his house. He lives on Hartley Avenue."

"Down near the Lake."

"To take a look at his stuff."

"Maybe... What's his name?"

"Velikovsky"

"Never heard of him."

* * *

A few days later Stecchini received a phone call from Deg. Deg had been to dinner at Sebastian's home. There was the usual babble and movement afterwards. He circled around the front room with its piles of papers and open bookshelves, pausing at the one where books of high mobility and heterogeneity sunned themselves for a few days. He picked out a forcefully jacketed book, *Oedipus and Akhnaton*, the author: Velikovsky. First the large photograph of the author, then the flyleaf, then the table of contents, then the index — he is grasping now for the thesis: the ill-fated incestuous Oedipus was none other than the Egyptian monotheistic pharaoh Akhnaton — more riffling of pages — the small definite sparking of the book browser.

"What's this?" He poked the book at Sebastian. "Any good?"

Sebastian was non-committal; probably he had not read it.

"Mind if I borrow it?"

He began to read it that evening. It was "True Detective," connecting two eminent figures never before joined. He finished it the next day.

How did he find the time to read it so promptly? A man who attends to a wife, a passel of kids, a dog, a cat, a station wagon, a large house with many doors and windows to mind, fireplaces to dampen, a busy telephone, a fat folder marked "action now", with half a dozen jobs, including a professorship and an editorship, with a propensity to daydream, and in that American society which tries in a hundred ways to pry into one's time and makes life tough for readers, and needing seven hours of sleep — how does he read a book? They say, "When you want something done, go to a busy man." His urges are compelling.

This act of devouring the book was typical of Deg. He would seize things out of his life-stream like a bear grabbing fish and do something with them, a compulsion to undertake and a compulsion to complete, not unlike Velikovsky, and the tie between the two men had something to do with V's recognition of this similarity, and perhaps with his growing problem of completion after the compulsion to take on matters lingered; but both men too sometimes had to drop affairs that needed completion or stuck to them beyond their point of pay-off, beyond hope also, so I would not stress the trait, and I even think that it may be so common as to be undistinguished. Velikovsky had made wide turns in his life, too, architecture, medical practice, psychoanalysis, politics, and now all this catastrophism which had something of everything.

Outwardly, they differed most apparently, Deg of medium height and compact build, V. tall and spare, the one with a midwestern background and accent, the other with a heavy Russian accent, Jewish above all. To V. outrage was a simple, direct emotion; Deg had the youngness of Americans that comes from promiscuous outrage and wide dispersal of feelings inimical to authorities. Pablo Picasso used to tell Gertrude Stein: "They are not men; they are not women; they are Americans." So how could Deg become outraged at the enemies of V.? Living was parcelled among sporadic outrages; indignation cropped out all over the American landscape.

While I am at it, I might say something, too, about Deg's attitude to his own writing because this also explains how he might view V.'s troubles. It is also about Gertrude Stein: "In those days she never asked anyone what they thought of her work, but were they interested enough to read it. Now she says if they bring themselves to read it they will be interested."

Victim of the Rule of Three, Deg added a first phrase: at first he thought what he wrote was interesting and everyone should be required to read it. Then, after he had passed most of his life in Gertrude Stein's second stage, he postulated a final stage, a nirvana where what he wrote was objectively of interest but neither he nor anyone else should be interested to read it.

This is too early to be analyzing character, but I cannot refrain from another comparison, a fatal difference. Whatever V. completed, he fiercely possessed; whatever Deg completed he relinquished. This made their cash flows, you might say, very different. And their advice to each other very different. Deg was saying to V.: "Give it away. Let it go!" and V. to Deg, baffled; "Why didn't you hold on to that?" Moreover V. overvalued whatever he gave, and undervalued what he received.

* * *

Halfway through the book — before Akhnaton had espoused his own mother, Queen Tiy, Deg was committed to V., the author. A literary *tour de force* of the rarest kind, it succeeds in making a single person out of two of the most famous heroes of antiquity. Nor are they of the so numerous

type of military heroes. They are the active substances of the raging intellect, flourishing amongst squirmy snakes of psychology and religion.

Should the temporal sequence be right, then the book would be valid, that Moses preceded Akhnaton and Akhnaton came before Oedipus. The legendary, historical, psychological and archaeological evidence marched in brilliant composition and concordance on behalf of V.'s thesis. That Moses had come first follows from V.'s book, *Ages in Chaos*, already a decade old, which was to be read and to convince Deg in a matter of weeks. That the Oedipus legend developed after the history of Akhnaton was established in the book itself to Deg's satisfaction, and he confirmed it once again when it came time to write *The Disastrous Love Affair of Moon and Mars*, years later.

By then he was convinced of V.'s theory that the Greek Dark Ages were in fact several centuries that had never existed, and then, within a couple of years, the masterful work of young Eddie Schorr effectively closed up the gap in two articles on Mycenae, Pylos, Troy, Gordion, and other sites. Velikovsky himself here speculated that Nikmed of Ugarit became Cadmus the founder of Thebes and carried the Oedipus legend from the East to the North. V.'s reconstructed chronology closed the centuries like a vise, to where Akhnaton could readily reach to Nikmed and Nikmed to Cadmus and out of it all came the Oedipus Rex of Thebes, the fabled character who gave name to the most popular concept of Sigmund Freud, and it was Freud who had brought on all of this work by his psychoanalytic disciple, but had himself missed both the precession of Moses and the identity of Oedipus as Akhnaton, although he had written directly about all three figures.

The book was the best produced of V.'s works, which were ordinarily drab. *Oedipus and Akhnaton* carried many fine illustrations, a superior jacket, and excellent typeface and good printing paper. Still, it did not sell as well as any of a dozen detective novels of the day, and, vibrant and valid, was marked by its publisher for abandonment in 1984.

Deg could be sure that practically none of his hundreds of friends and colleagues, students and acquaintances had yet read the book or would ever do so... But then he too had written books of which none but the textbooks had sold over a thousand copies. And he could recite the names of many distinguished scholars whose books had sold less. The dream of best-selling great books nevertheless carries on, a myth, deadly to most and profitable to a very few.

CHAPTER TWO

THE PRODIGAL ARCHIVE

The other book, that which won Velikovsky fame, income, and scientific disgrace, was a happy accident of publishing. It could hardly have become a best-seller on its merits; very few books do, and this one was not easy to read or flamboyant. *Worlds in Collision* was reluctantly published, deceptively publicized, and foolishly attacked. It was written in the 1940's, after *Ages in Chaos* had been completed and had been circulating among publishers and collecting one rejection after another. Evidently the later work had the better chance, because of its larger, more explosive message.

But *Worlds in Collision*, too, was rejected time after time, this all during a period of high prosperity when publishing company shares boomed on the stock market and practically anything might be brought out. Velikovsky was desperate. One evening he walked the Upper West Side of Manhattan with Elisheva, telling her of how he would buy a typesetting machine and they would compose the book at home and he would sell it himself. He would have done so.

All of his publications before then — there were not many — had been in some sense subsidized, the articles appearing in psychoanalytic journals, supported by small intellectual circles, the pamphlets appearing under the shadowy imprint of the Hebrew University of Jerusalem when this was only a few dedicated utopians enjoying an impetus from Simon Velikovsky's purse. V. knew something about publishing, as he did about many things.

V. would never have been "himself", a revered image to countless readers and a buffoon to scientists and scholars had he not fallen into the crazy typical pattern of a popular author. He was able to catch the attention of John J. O'Neill, Science Editor of the *New York Herald Tribune*, who was thrilled by the manuscript and wrote about it in an article of August 11, 1946. James Putnam, an Editor of Macmillan Company took it up, praised

it among his acquaintances, processed it through several readers and achieved a favorable vote. A chapter of the book was sold to the *Reader's Digest* and other selections to *Collier's Magazine*. *Collier's*, struggling for circulation, took a large ad in the *Herald Tribune*, headlining that modern science had now proved the Bible correct, while the *Reader's Digest* carried the story of the Sun's standing still at Beth-Horon by the command of Joshua, so as to let the Israelites finish off their enemies.

Both stories and the publicity attendant upon them played directly to a large audience of bemused Jews and "Old Testament" Christians, including what would be called creationists and millennialists. Then, even before its readers could discover that it was not quite what they had expected, the wrath of scientists descended upon the book. Velikovsky's figure, until then only that of a minor personage in psychoanalytic reading circles, was elevated to a pyre of fame and burned to the ground. Macmillan hastily sold its rights to Doubleday Publishers.

Of all this that occurred between 1950 and 1962, Deg learned upon his first meetings with V. "I want you to read everything," he said and handed over to him two monumental manuscripts entitled *Stargazers and Grave-diggers*. "Everything" meant also *Worlds in Collision* and *Ages in Chaos*. Deg complimented him upon the Oedipus book and wondered at the documentation piled upon the living floor for examination.

Velikovsky wondered, too, for noone came to him as innocently as his new acquaintance. He was thankful but also dismayed at this walking effect of the suppression of his books. (It hardly occurred to him that his book might have sold under a thousand copies if it had been published by a university press without the publicity that he himself found rather obnoxious, in which case practically everyone might have been expected to be ignorant of it, but the ilk of Deg might have known it).

V.'s correspondance was still heavy after a dozen years. His readers sent him every scrap of publicity that they found and he kept it all and tried to reply, far more so than any other author of Deg's acquaintance. A large public was out there somewhere, a heterogeneous network of bright students, people suspicious of the scientific and academic establishments, and Bible believers.

Mrs. V. was present; she tried always to be on hand when visitors came and to Deg at least, hers was always a welcome presence. V. kept nothing from Elisheva that he was not also keeping from his visitors. Sheva's grand piano stood in the next room, between a desk loaded with papers and a great cabinet stuffed with books. In the front room were couches and chairs, none too comfortable, and a large coffee table accommodating the tea, crackers and cheese, cakes and dry Israeli white wine that would be brought forth. There were ashtrays, too, for then many were smokers, not V., for he had quit years before after he had suffered a stomach cancer, whose removal had forced a lightened diet as well. Oriental rugs stretched across the floors.

The ponderous front porch let in little light nor did the rooms have much place for an elegant style; or perhaps they reflected an empiricist, not a philosopher. Their charm depended upon the objects in themselves: Sheva's piano and the music resting on it, her strong marble sculptures, several handsome and less useful books on art and archaeology that had entered lately, like those at Sebastian's from which Deg had plucked *Oedipus and Akhnaton*.

From the porch, one penetrated into the sitting room through heavy grey stone walls in five stages: first up the flagstone walk through thick bushes, then up the stairs, then through the first heavy door into a tiny hall, then another heavy door, then an anteroom with a mail-cluttered table and clothes-closet, and finally into the front room.

Elisheva, like her husband, had a strong character and great energy. She had large hands and a solid body, maintained a direct and friendly stare through thick glasses, and was perhaps of his age. She had mastered the arts of music and sculpture. Perhaps all the laborious functionalism of its occupants gave the rooms a lack-luster belying the considerable value of their contents. Poor cooks have dazzling automated kitchens; disemployed people have smart interiors. Much later on, when he finally released his books to Dell Publishers for publication in paperback and received a hundred thousand dollars, V. went into a fit of remodelling, building a garage and new airy light-struck rooms, redistributing books and papers for greater efficiency, buying flashy cars for himself and his grandchildren, reminding Deg of Parkinson's "Law," that, as an Empire enters upon its finale, it builds extravagantly.

Deg had often to consider, when he taught courses on leadership and creativity, whether a person's appearance correlated with his mind and effectiveness. The stereotype is, of course, "Yes, it does." A great general has a martial air, a scholar looks like a parsnip, an athlete is musclebound, and so on.

Deg had arrived at the all-answering concept of sociology — the mutual interaction of physique and role. Little Napoleon looked more imperial than tall de Gaulle, who was obstinate and oafish. But de Gaulle thought of himself as a Great Leader and worthy husband to La Belle France, and played the part and *became* a great leader. ("France is a widow," Pompidou orated when he died.)

"The Russian Jews are the handsomest of all," Stephanie Neuman told Deg, and he, looking at her, had of course to agree. The best explanation of the phenomenon comes in a note by V. himself, published posthumously. The "lost Tribes of Israel" had been moved North, and passed through the Caucasus between the Black and Caspian Seas into the lower Volga River Basin. There they mingled genetically with the ever-changing population, with always at least a critical fraction maintaining the Judaic culture-core. Deg had won a piece of the action; his wife's family, with its cluster of Teutonic cognomens — Oppenheims, Lauterbachs, Weinstains,

Fleishackers, etc — had managed some handsome blonde alternatives in the aftermath of the Diaspora.

"But see here..." to use a common interjection of V., Velikovsky stretched his large spare frame a full two meters, his face with all its big bones and high forehead was cleanshaven and forceful, his large brown eyes open and direct behind his reading glasses, his movements from his favorite low chair, up and down, across the room, untiring and easy, not graceful but neither awkward. His voice was sure, slow, deep, his words marvellously well-chosen, uttered in the language that he knew least well of Russian, Hebrew, and German, while Arabic and French came after. He couldn't match Stecchini, who had these, plus Italian, Latin, Greek and Arabic, plus the dead languages of Babylon and Egypt, while Deg with his modest portions of French and Italian and smattering of German, Latin, and Spanish was in a pitiable state.

V's English was formal, never Americanized; his dignity forbade slang or the vernacular, though it amused him to have the vernacular explained. Deg was fond of H.L. Mencken and played loose with the language when let off the field of science. "Sand-bag them," he remarked when V. was expostulating over the attempts of a panel of the American Association for the Advancement of Science to get hold of his finalized paper without revealing to him their final replies to it. "What does 'sand-bag' mean?" V. asked. "It's what thugs use to hit people with from behind. Let them have the paper; let them rewrite their papers; then withdraw your paper." Then he explained how in some impolite poker games, if you have a good hand, you sometimes pass on it, enticing the other players to bet on their own hands, then double their bets. That's sand-bagging, too.

V. wrote well, better than Deg, I think, although he denied it and had to make liberal use of copy-editors. For he explained his every step carefully and was rarely abstract or harsh, whereas Deg usually wrote condensedly, abstractly, and stridently.

Looking at V. in these first meetings in a more analytic way, Deg questioned whether a person so physically modelled to the ideal expectation of a heroic figure could nevertheless be a genius and not an actor, an honest victim and not a charlatan. Of what could V. complain; he was famous; his books sold by the tens of thousands; his messages had carried throughout the English-speaking world, into several language-areas of the western world besides.

Deg flipped through the loose-leaf volumes as they talked. He could read fast and V. was alternately suspicious and admiring of this facility. "I am a slow reader," he announced on occasion. "Yes, but I don't have your memory," grumbled Deg. V. had a superb memory for details. Deg gulped down batches of material, retained their forms, and excreted the details. This is what happened when he read: the stuff was gobbled up by pre-existing forms.

Every detail of the volumes before them was remembered by V. though

he could hardly have seen most of it for some years. Every few pages contained another foolish review, comment or letter by a scientist or historian or archaeologist. Just to be preserved and collected, side by side, they damned themselves and each other as envious, illogical, irrelevant, ignorant, narrow, and incompetent.

Why haven't you published this, it's great? he asked V. V. had strung together a large and complicated story with only rare descriptions and without editorial comment; it was not vainglorious or egocentric; the documents marched along by themselves, calling out their message in turn. V. blew hot and cold on the idea of their publication. Mainly he feared legal action were he to reprint letters several of which had come to him deviously. Of these Deg could not feel sure, but he argued that persons in a public controversy in which their reputations were at stake might publish private correspondence. A menacing letter from Professor Fred Whipple to the Macmillan Company might be published because it injured and defamed the author and was associated with letters of the same type from other academicians. His publishers, Doubleday, were unsure, said V.

In fact the volumes were not published until after his death. By then the whole Macmillan archive of those years had been given to the New York Public Library and Warner Sizemore, who knew the case as well as anyone alive, located them there, with all the papers that had been so guarded for a few years. When Leroy Ellenberger reviewed them in 1983, he noted especially Brett's account of the final interview with Velikovsky when the President of Macmillan informed Velikovsky that *Worlds in Collision* could no longer be tolerated on the Macmillan list, but had to be transferred out, and luckily Doubleday was ready to assume the risk. When asked how the two versions of the meeting compared, Velikovsky's and Brett's, Ellenberger, who was by then most sensitive to contradictions in the Velikovsky story, granted that substantially they agreed, save that V. had understandably portrayed himself as less shaken and more in command of the situation than Brett had viewed him to be.

The materials that V. showed Deg were a sociologist's wishful dream. Deg decided immediately to publish in the *American Behavioral Scientist* the story of science vs. scientism, as he put it. He carried home the manuscripts and *Worlds in Collision*, which Velikovsky carefully autographed, a little touch that Deg was unused to: books were books: he was never into first editions or autographed copies, and in those days had to be reminded by his publishers that a page was reserved for a dedication if he wished to use it.

The journalistic papers he hurried through and put aside. They would give an example here and another there. Some readers no doubt would be astonished at the behavior of their sacred scientists, but the case was mere basic social psychology. The scientists and their coterie of publicists were behaving very much as might be expected in the face of disturbing theories, like politicians, like administrators, bishops, and all other elites of

organized networks.

He decided to take upon himself the most difficult task, the theoretical analysis of the system that exuded injustice normally. The historical section would go to Stecchini and deal with scientific precedents to V.'s catastrophism, an approach quite new to the discussions of a decade earlier, and one which Stecchini, using the principle of contradictions, executed beautifully, calling up Whiston, Boulanger, La Place and Kugler as unexpected witnesses on behalf of the defendant. The straight history of the affair went to Ralph Juergens, who had been introduced to Deg by V. as a mechanical engineer, much interested in electrical theory, who had moved his family down from Ohio in order to be near to where V. was working; he was now a scientific editor working in New York for McGraw Hill.

Juergens had published nothing; he knew the facts, however; he was a careful worker, Deg was quick to note; he worked very hard; he held V.'s confidence (not easy to achieve) and won Deg's sympathy and respect. No one else could have done the job without a year's study; even then it would have had to be a historian of science, who would risk his career if he accepted the challenge of the facts, or a publicist, such as Eric Larrabee, who would have produced a recital much like Ralph's but probably too late for publication. As a matter of fact, his name came up and V. reported that he had been under contract for years with Doubleday to do a book on the controversy. No sooner had Deg's *ABS* decided to publish the story than V. got in touch with Larrabee and prevailed upon him to sell the idea of an article to *Harper's Magazine*, which Larrabee did, by virtue of an old connection there, and so wrote a piece that actually appeared several weeks before the special issue of the *ABS*.

After examining the files on the case, Deg turned to reading *Worlds in Collision*, telling himself that it might be wrong, harmful, mythical, distorted, and incompetent; still his intuition was prompted by all that he had learned thus far: V. could not do a bad job on anything. So he found the book was none of these things, and was not surprised. Then he worried and never ceased to worry that his taking up the cause of V. came about because he thought V. to be correct in his theories rather than because his rights were violated.

Worlds in Collision is a book in two parts, one on the Venus catastrophes, the second on the Mars catastrophes. These conform to two sets of events that are claimed to have befallen the world in the years around 1450 and 700 B.C., about seven hundred years apart. The planet Venus, argued Velikovsky, began its career as a comet that probably exploded from the giant planet Jupiter sometime, whether a few years or thousands of years before its disastrous encounters with Earth. (V. never used B.C. preferring BCE, "Before the Common Era" or a simple negative [as -1450],

begrudging the calendar of world history to the Christians, which Deg agreed to in principle but thought was only quibbling, given the huge con-tortions history has suffered. Better he thought to settle on the year 2000 as the present, use B.P. back from this date, thus to give us some standard-ization for a generation or so, or perhaps to settle upon 1919, the year when the first association of the nations of all the world was formed, the League of Nations).

Flaming Venus passed with its huge cometary tail close by the Earth occasioning general disaster by flood, fire, pestilence, electric shock, and fallouts of various materials, and incited a horrendus fear that affected all areas of culture everywhere down to the present day. Mankind lived virtu-ally in a Venusian world for seven centuries, for other near passes occurred at 52 year intervals, until the comet disturbed Mars, sent Mars to molest the Earth and Moon, and brought a Martian period that endured for rather less than a century. All of this had severe and prolonged after-affects geologically, biologically, and culturally.

V. endeavored to be exact, allowing the series of Mars incidents to oc-cur between the years -776 and -687 on the basis of legends and historical-archaeological evidence from around the Mediterranean and wherever else in the world it cropped up. For example, an incident of the year -776 would be the founding of the Olympic Games, those sacred manifestations of aggressive competitive sport that brought the Greek communities together and were said to have been founded by Hercules, who has been identified by several scholars with the god Mars or Ares; an instance of the year -687 would be the destruction by natural disaster of the army of the Assyrian emperor Sennacherib while besieging Jerusalem.

Thus the bare plot. Its importance derives from the shock it gave to conventional natural science and history, its extension of the use of legen-dary materials to reconstruct history, and the excitement it caused among many people eager to escape the toils of modern science.

The most disturbing claim of *Worlds in Collision* was that the planet Venus as a comet approached and devastated Earth. Several excellent writers, as I shall explain later, had claimed that comets had devastated the Earth, and mathematical exercises on the putative effects of comets in pas-sages and collisions with Earth are conventionally acceptable. Not so planets, that are believed to be fully and nicely bound to their present or-bits.

The sequence of thoughts occurred to V.: first, the Egyptian accepted chronology is wrong and Moses preceded Akhnaton; next, at the time of Exodus, there was heavy natural turbulence; third, the turbulence was in-cited from the skies, and took numerous forms well recounted in legend and sacred scriptures; finally, evidence came in rapidly from all parts of the world to support the idea that the planet Venus was involved as prime cause. A mosaic of legends from the Near East, Greece, Italy, China, and the Americas could be fashioned, and enough geological evidence would

be assembled to tolerate the suppositions of the legends.

V. was not as rooted in Newtonian and Darwinian prejudices as the typical Anglo-American scholar. He could also contemplate ancient evidence without contempt. (A psychiatrist might recall, "Ah, yes, he loved and respected his father Simon who worked long for the revival of Israel.") V. also knew that natural laws must rest upon evidence, not dogma; if evidence contradicts the laws, the laws must change. The immensity of the topic; the difficulties in finding and handling the data; the roundabout way in which the books were published; and many other intervening and confusing variables concealed the essentially proper progression of V.'s mind, which behaved in ways both psychologically understandable and logically proper. (Often, private motives lead men scientifically astray; here, as sometimes happens, V.'s private motives led him along the path to significant scientific theses and discoveries.)

To Deg's view, from the beginning, the ethical duty of science was clear. Confronted with V.'s claims, the scientist should weigh the evidence, first, for the chronology, second for the Exodus disasters, third for the exoterrestrial involvement, and finally for the identity of the forces. In each case, there is, then, a probability, low or high, of validity. Actually the only policy problem for science here is how much additional scientific energies should be directed at the intriguing hypotheses. This implies the possibility of proving (disproving) them; and the effort required to raise the probabilities of valid answers to a respectable level.

In American politics and law, case after case had imprinted upon all concerned the notion of a right to due process of law and to certain basic freedoms as distinct from the desirability or correctness of a position. There is a religious right, when forbidden by one's religion, to not salute the national flag; there is a right to not confess to a criminal act. And so on.

Scientific behavior is not so clearly mannered. It is not governed by the coercive physical force that gives more distinct form to the organs of the state. Also a general belief in individualism among scientists, amounting to a kind of philosophical anarchism, makes each scientist judge and executor of his beliefs.

Deg was enough of a philosopher and practitioner of science to recognize a widespread belief, that a truth exists upon a subject and that no consideration needs be given untruth or antitruth. There was, on the other hand, the reputable principle that all scientific positions are basically hypothetical; nothing is proven now and forever. And there was even the principle, espoused by many contemporaries, that there are as many scientific truths as may be useful in solving a practical problem: in other words, never mind the principle: perform the operation and the principle, if the operation is successful, will come trailing after.

But the vulgar and predominant belief is a belief in truth and antitruth, especially when dealing with outsiders, and V., by this view, deserved no more than he received, there being numbers of established truths violated

by his assertions. He should have banked his receipts and joined the out-caste company of the von Danikens.

However, according to the other views, all of which merge in this regard, nothing that V. could possibly say should deprive him of a hearing, save that he should present his views in a format suitable for passing judgement. Deg had to make up his mind whether the basic offering was appropriate for judgement and whether a hearing was provided. Still he could not but feel that the organization of science would fall apart if no advantage were given to the accepted "truth" just as the state would become defenseless if everyone refused to serve in the armed forces on constitutional grounds.

What happens ordinarily, he observed often, is that the more "obviously untrue" a proposition and its proof appear, the less due process of law is used and need be used in dealing with it. We have to reconcile ourselves to the "miscarriage of justice", at least in science and probably in every area of conflict, the "Bill of Rights" notwithstanding. If for no other reason, the burden of treating every statement with all the respect due and owing to the best and most correct-seeming statements would be impossible for the economy of science to bear.

In return, Deg told himself, we can ask for some minimal formatting of a case prior to processing it through the reception system of science. This, it appeared to him, V. had done, and much more, and some scientists had nevertheless pilloried him and ruined his chances of obtaining scientific respectability — not affirmative agreement, but just simple honest respect for a remarkable job.

V. had approached the altars of science with the assiduous ritual of Aaron before the Holies of Holies. And, when, like the drunken sons of Aaron, his books were struck by the Lord's Fire, he was stunned. "What sacrilege have I committed?" he asked himself repeatedly. And the answer, from all sides, if not from heaven, was "None." It is true that he had won literary fame and supported his family meanwhile, a rare success among non-academic writers in America. So what? Have the rich no right to complain? Who else can send the steak back to the kitchen?

The scene was familiar and the opportunity presented: the establishments of academia had offended a man who was a fighter and had his evidence in hand. Something rare and good in the history of science might be achieved. With the contaminants of politics and religion absent from the mixture, and the publishers acting as catalysts, it was as clean a case of pure science in action as one might ever hope to come upon.

The work on the special Velikovsky issue of the *American Behavioral Scientist* had been mostly done when Deg addressed a letter to his Advisory Board explaining Velikovsky's position and justifying a special issue in

support of him.

March 8, 1963

To: ABS Advisory Board

Subject: Notes on several current matters

I. We plan to devote a major portion of our June issue [actually it came out in September] to a topic called: "The Politics of Science: The Velikovsky Case." Immanuel Velikovsky, as you probably know, is a highly controversial figure whose book *Worlds in Collision* incited the wrath of a number of astronomers and geologists twelve years ago. Several other works dealt with similar themes of prehistoric catastrophe, social upheavals, and the origins of myth. Another book, somewhat distinct, is *Oedipus and Aknah-ton*. I believe him to be a brilliant theorist and am not persuaded that his criticisms of various astronomical principles are as wrong as Shapley and others have made them out to be. The recent Venus probe has brought some surprising information in accord with his views, for example. However, our main interest in the topic lies in its relation to numbers 3, 7, 8, 9, 12, 13, 14, and 16 of the ABS Program. A basic question is *the canons which science uses to appraise work that is offered*. As we move into the Velikovsky case, we observe that both the normal and the peculiar features of the criticism of this work throw much light on the workings of the scientific establishment. Additionally the evidence of boycott of a publisher in the case leads one into the question of the relation of scientists to freedom of the press. The proposed table of contents would include first a history of the Velikovsky case, a comparison of the case with various episodes in the history of science by Stecchini, a content analysis of the reviews of Velikovsky's book, an article by Velikovsky reciting ten important instances in which his theorizing led him to correct or at least now respectable statements about natural events (this one to give a flavor of the substance of the case), and an appraisal of the operations of the scientific establishment. We have abundant material. We lack funds, as usual, for the kind of content analysis and investigation that should be engaged in. If any of you can find a few dollars to lend to this enterprise, it will be helpful in improving the product (especially in the reliability of coding the book reviews, and increasing the number sampled from 100 up to 500)....

The "good will and advice" was there; as for the money, the Board knew Deg was bluffing: the magazine would continue, one way or another.

Also, to attack frontally an array of scientists, Deg thought to assemble a special committee of notables that would protect his flanks. He sent the manuscript of the *ABS* issue to his friends Harold D. Lasswell, Hadley Cantril, and Luther Evans, all three well-known, distinguished and

innovative social scientists. He also contacted, at Velikovsky's suggestion, Salvador de Madariaga, Moses Hadas, Horace Kallen, Harold Latham, R.H. Hillenkoetter, and Philip Wittenberg. Madariaga and Hillenkoetter admired V's work; Hadas respected the learning evidenced in it; Kallen was a grand liberal educator who had run interference for V. when V. was trying to obtain a reading from Harlow Shapley; Latham had shepherded *Worlds in Collision* through Macmillan; and Wittenberg was an expert on libel law. Deg also invited Harry H. Hess, Chairman of the Geology Department at Princeton, who had given V. a forum, and was helpful on several later occasions; V. counted him as a friend; Deg had met him and found him *simpatico* and every inch what an Admiral in the U.S. Navy (Reserve) should be. He was a top leader in the wartime and post-war revolution in oceanography. Hess replied by hand:

June 4, 1963 Washington, DC.

Dear Editor de Grazia:

The manuscripts you sent me reached me at a particularly bad time: PhD exams, department budget construction, a request to appear before a committee of Congress and finally orders to two weeks of active duty in the Navy starting yesterday. I have spent two days reading the material and trying to analyze my own thoughts.

I can't urge you to publish it. Velikovsky is a friend of mine. You will reopen old wounds and create more antagonism against him, though at the same time you will support his position and bring out the injustices. I am not sure that this is a net gain.

Why were scientists outraged by Velikovsky's books? This is the question I have been asking myself because I too felt a sense of outrage even though I have a kindly feeling towards him as a friend. The reasons given by Stecchini are plausible and perhaps true with respect to some scientists. The real reason is something much more fundamental — at least the reason why I rebel is, and I am a fairly good guinea pig example of an ordinary scientist.

I haven't time to write the essay that might be written to explain the phenomenon correctly. Velikovsky is partly to blame because of the way he handles his data. This is no excuse for most of those who criticize him. Nor is it an excuse for the manner in which they have treated him.

Thank you for sending me the manuscripts. I wish I could do more for you than I have.

Sincerely,
H. H. Hess

Deg was not surprised nor did he feel Hess's refusal at all unworthy.

Hess was not the Admiral Nelson to violate Admiralty orders and take his fleet into battle; still, as Deg remarked to me, we already had an admiral (referring to Admiral Hillenkoetter), we certainly could have used a geologist on the team. Years later, Deg was able to persuade Hess to join the Board of Trustees of a foundation for studies of catastrophe.

A problem of concern to me was that, in the years following, there was no evident opposition to V., whether as to his treatment or his ideas, carried in the *ABS* files and the later book, *The Velikovsky Affair*, and I badgered Deg on this point repeatedly. He puts up a kind of general defense that has some merit: "Under the circumstances, we did what we could to excite an opposition. We had no money to conduct research. Everyone was unpaid and working at other things for a living. The issue on V. was itself only one of ten issues to appear that year, each on different topics. Mainly the expressions of disagreement were directed at the substance of V.'s theories, which were, strictly speaking, irrelevant to the discussion. Juergens went farther in explaining these and defending them than I would have gone. It was like pulling teeth to get a scientist to enter upon the politics and sociology or even the methodology of the case. One received simply arguments on the stability of the solar system and the unreliability of legends and ancient history."

Deg talked on, as the tape spun on its roll:

I wrote Otto Neugebauer, a hostile critic of V. and renowned expert on Babylonian astronomy, but he did not reply for a long time, for years, in fact. I met with Harold Lasswell, who was a psychologist, political scientist and professor of Law at Yale; he was favorable to the issue, which he read, but concerned that the bridge he perceived as abuilding between the natural and human scientists might be damaged. (This was then the well-publicized thesis of C.P. Snow, physicist and novelist, who decried the existence of these two uncommunicative worlds.) I visited Freeman Dyson, the mathematician, who was at the Institute for Advanced Studies and had been President of the Federation of American Scientists, of which I was a member, and which was agitating against the "Cold War." Dyson was lukewarm about the matter; he had been approached by V. some time before, and had no desire to enter the lists; furthermore he found the scenario of V.'s work unacceptable. There was no one, it seemed, on the first call for debate, and very few ever, who were ready to defend what had happened, as there was no one ready to defend V.'s substantive views on exoterrestrially-produced disasters. Worse, there was hardly a notable scientist of the Establishment of physics, geology, astronomy who was willing publicly to acknowledge the legitimacy of the discussion. I approached Tom Kuhn, a neighbor, who was beginning to win fame as a historian of science. He shied away.

I will say more. You have been presenting my analogy of this case with cases in the law and courts. Actually, this is only one side of the coin. Just

as the law and courts are utterly inadequate to their tasks when a society is failing, so too in science the reception system is inadequate when the institutions and politics of science are failing to begin with. That is, unless you have a liberal, open-minded republic of science, you'll have too many cases of injustice in the reception system. I spent some time developing the problem of the institutions that are needed in science as in politics to back up a proper reception system, but no one of competence has come around to discuss this subject, which is as critical today as it was then. Criminality in science, if I may use the word, or misbehavior, is common throughout the sciences and ultimately its origins dissolve into the background of an illiberal, non-pragmatic, materialistically competitive, and philosophically ignorant environment where scientists are bred.

I felt that Deg's tone was becoming strident. I still doubted that he had exhausted the possibilities of a debate, and later on I will tell of other forensic episodes. He might have talked to Dr. Norman Newell, of the New York Natural History Museum; Ted McNulty, one of his aides and squash-playing friends had learned that Newell had something to say; he might at least have tried to speak to the king-pin Harlow Shapley, who was old but still feisty; he might have approached George Brett, President of Macmillan, to corroborate that he had "dumped" V. and explain why. Further, Deg might well have been more rigid, and might have excluded all substantive comment of V's theories, admittedly to the point of losing some of the excitement of his story. It is true, however, that copies of the issue were sent to potential opponents among natural scientists, inviting and expecting comment. There were none. Nor did the thousands of normal readers produce from among their number calls or letters of protest.

Nor, with one or two exceptions, did any evidence appear for decades that would affect the statements made on the affair by the three authors. In May of 1983, Leroy Ellenberger told me that he had found at least one bit of evidence in the Macmillan files giving scientists reason to attack Macmillan for advertising the book as a work in science. A regular catalogue of Macmillan books in science carried *Worlds in Collision* as a possible supplementary reading in general courses. This was a trifle, to be sure, but a red cloth is no trifle to a goaded bull.

Still the annoying question once more arises: why should not the book have been advertised as a contribution to science, even if it were ultimately to go into oblivion with most other books that tried to make contributions to science? So again I prodded Deg on the matter and this time got what amounted to a lecture.

Formal law has the strongest means to avoid consideration of the merits of a case in judging whether the case properly belongs in a certain court and has been properly heard in that court. It insists that the accused be given his day in court, with a defense lawyer, an unprejudiced jury in most cases, and a