After the Revolution, or, Paradigms Lost:  
Outsiders, Anomalies, and the Future of "Forbidden Science"

by Joseph M. Felser

Dr. Jacques Vallee is the astrophysicist and computer specialist who purportedly served as the model for the French scientist played by the late François Truffaut in Steven Spielberg's fairy-tale version of UFO contact, Close Encounters of the Third Kind. He is also one of the most interesting and intellectually sophisticated students of ufology around. A genuine practicing scientist and longtime student of the UFO phenomenon, he is equally at home in areas normally ceded to armchair academics like myself—areas such as the history and sociology of science. In Forbidden Science (1992), Vallee relates a chilling first-hand account about the irrationalism of supposedly rational, open-minded scientists.

In 1961, the 22-year-old Vallee was a French government scientist serving on the staff of the artificial satellite service of the Paris Observatory. His job was to track as many orbiting space objects as possible. He began his job with "great enthusiasm," he writes, "assuming that we would be engaged in genuine research, in the highest quest for truth." But the youthful (and, in his own words, naive) scientist was soon to be disappointed:

Occasionally we observe objects that remain unidentified. Thus on 11 July at 10:35 p.m. I saw a satellite brighter than second magnitude. I had time to log a few data points. On another occasion several of us recorded no less than eleven points. The next morning [Vallee's immediate superior, astronomer Paul] Muller, who behaves like a petty Army officer, simply confiscated the tape and destroyed it, although a similar object had just been tracked by other astronomers at Besançon and by Pierre Neirinck, a satellite expert based in Saint-Malo.

"Why don't we send the data to the Americans?" I asked him.
Muller just shrugged.
"The Americans would laugh at us."

He seems terrified at the idea that the morning papers might come out with the headline: "Paris observatory tracking something it cannot identify." Muller is a tough man who believes in discipline and a simple world where everything is neatly labeled.²

The fear of ridicule and the anxious silence that grows out of that fear, insidiously spreading itself like a metastasizing cancer, are potent obstacles to a genuinely rational inquiry. In theory, science should welcome anomalies as the harbingers of new discoveries. The
scientific intelligence should derive joy from being surprised by new and hitherto unexplained phenomena. After all, isn't that what science is all about?

   Well, maybe.

   Then again, maybe not.

Michael A. Cremo, a research associate with Bhaktivedanta Institute (the think tank run by the International Society for Krishna Consciousness) is a specialist in the history and philosophy of science. Together with Richard L. Thompson, Cremo recently authored a provocative book entitled *Forbidden Archeology: The hidden history of the human race* (1993). I confess that I have not yet read Cremo's book, which reportedly (by no less an authority than Colin Wilson) presents some reasonably compelling evidence and arguments in favor of the view that human beings and their civilization are far older than previously believed—perhaps existing as long ago as the Miocene Era. This view of extreme human antiquity is consistent with certain orthodox Hindu teachings but not, of course, with the orthodoxy of mainstream Western anthropology and history.

Although, as I say, I have not yet read *Forbidden Archeology*, I have read Cremo's account of the reaction of mainstream intellectuals to the direct and significant challenges to Western scientific orthodoxy posed by his recent work.³ Like some of Jacques Vallee's reminiscences, Cremo's catalogue of official silence and derision makes for some chilling—or perhaps (depending on your point of view or sense of humor) amusing—reading. The following is an excerpt from a letter received by Cremo from one Michael Mulkay, a leading expert in the field of the sociology of scientific knowledge. It is typical of the response (or rather the lack thereof) received by Cremo from the mainstream:

I have not yet read your manuscript; nor can I at present see a space in which I would have time to read it. I realize this must be extremely irritating to you, after all your effort and your hope of making an impact. But your potential audience, including me, are all obsessively involved in their own affairs. It takes a long time for academic books to have any effect. Sometimes it takes years for them to be reviewed. What I regard as my two best books met with a profound silence. I hope you do much better than that. But I cannot at this moment comment on your text.⁴
I must say that both Crema's and Vallee's accounts struck home. Reading them, I felt pangs of both recognition and empathy. For I know quite well from my own unhappy experience what it is like to be an intellectual outsider—a living, breathing anomaly.

The Strange Story of Modern Philosophy

Colin Wilson has dubbed it—quite fittingly—"The Strange Story of Modern Philosophy." For better or for worse (and I also think far for the worse), mainstream academic philosophy in the English-speaking world of the twentieth century has been dominated by the teachings of such figures as Ludwig Wittgenstein, Gottlob Frege, Bertrand Russell, and A.J. Ayer. These thinkers were united by a common aim: they sought to turn philosophy into a "rigorous" and "scientific"—in the memorable phrase of William James, "tough-minded"—discipline. This was to be accomplished by purging philosophy of all things "metaphysical," which became a pejorative term; indeed, the worst possible insult. What could not be objectively verified by observation and repeated experiment, or expressed in terms having clear and unambiguous meanings, was dismissed as unreal, unimportant, or meaningless. Sheer hogwash. Metaphysics.

Not surprisingly, obviously "woo-woo" topics such as religion, mysticism, and parapsychology (or what was then called psychical research) failed to make the grade. Moreover, anything that remotely smacked of the "subjective," including the inner desires, wishes, feelings, imaginings, intuitions, and inspirations of the philosophers themselves, likewise became suspect. In other words, from the standpoint of "scientific" philosophy, consciousness itself became an anomaly—and not a very philosophically interesting one at that. Wittgenstein's two most famous dictums—"That whereof one cannot speak one must be silent," and "There is no such thing as a private language"—epitomize this narrow, sectarian, behaviorist outlook.

Because I did my graduate work in philosophy at a large, research-oriented university, I was naturally expected to swim in the narrow, scientistic mainstream. But I could not, either by conviction or by temperament, toe the party line. As a result, my work was frequently met with either polite puzzlement or outright hostility by most of my teachers. I was an oddity. It seemed
to them either that I was not really doing philosophy at all, or else that I was trying to do philosophy, but doing it rather badly. Of course, it never occurred to them that the most reasonable response to my anomalous behavior might be to put their own theories into question. Heaven forbid. Vallee writes, also from personal experience: "You pay a high price for trying to get out of the maze, to think different thoughts, to discover an alternative to common customs."6

Back to the future

So it is that I am right alongside Cremo cheering the demise of what he calls the "reductionist, materialist consensus that has for several centuries dominated science." For the materialist ideology has no less dominated modern, and even so-called postmodern, philosophy. If Cremo, Wilson, and others thus turn out to be right and humanity is far older than previously believed by the scientific mainstream, I say Hip Hip Hooray! Let what Cremo dubs the "embattled establishment" take its well-deserved lumps for not trusting in the very empiricism to which it gives mere lip service. Theories and models will have to be adjusted accordingly. After all, facts are facts—right?

On the other hand, when it comes to what Cremo terms the emerging "new consensus" of scientific thought, I am hedging my bets. The reason for my caution is that habits of thought are among the hardest habits of all to break. And by far the most ingrained habit of thought going is that of falling into unquestioning acceptance of our own most treasured beliefs. We could easily overthrow the materialist dogma only to find ourselves genuflecting before a new and improved idol a few years down the line.

I thus find myself in agreement with one of Cremo's critics, the anthropologist Jonathan Marks, when he disparages "all religious-based science." Ah, but if only Marks and his cohorts could admit that so-called "scientific" materialism is just one more religion, with its own distinctive rituals, priesthood, saints, and feast-days. Follow the pilgrim way of the white lab coat to MIT, Cal Tech, Harvard, Princeton, Stanford, Michigan, and Chicago and see for yourself.
Let us then, for the sake of argument, concede that the Puranas, the Bible—and other ancient texts and religious traditions—contain intriguing suggestions about human origins that are worth pursuing through scientific inquiry. Suggestions that, for various reasons, have fallen on the deaf ears of mainstream scientists. Perhaps there was indeed a catastrophic flood. Perhaps Plato was right and there was an Atlantis. Perhaps extraterrestrials did (and do) have something to do with human affairs. Who knows?

However, the bottom-line issue not whether any of these intriguing claims turns out to be true—or at least assigned the status of a reasonable belief warranted by the best available evidence. The real issue is not the particular beliefs themselves, but rather, the process by which those beliefs are arrived at—and, if we are reasonably lucky (or luckily reasonable), revised or abandoned. The only real question is: Shall we have a genuinely rational, that is, fully free and open, inquiry or not? Beliefs, like the tide, come and go; it is the process by which beliefs are generated that determines how we will approach the next anomalous discovery, and the one after that, and so on.

For any would-be rational inquiry that is firmly anchored in a religious framework will finally reach a crisis point at which the relevant religious authorities will be forced by their own orthodoxy to declare: "Here, and no further, must you go." It doesn't matter whether the authorities are Hindu swamis, Buddhist lamas, Catholic priests, Protestant ministers, Jewish rabbis, Islamic mullahs, university professors in white lab coats, or New Age gurus. It is absolutely essential in a religion that all questions must stop at a certain prescribed point. As the old Talking Heads song goes, "Everybody get in line."

All traditional religions tend to be linear.

Buddhism, for example, is probably the most undogmatic and iconoclastic religion under the sun. There is that old Zen saying that epitomizes this relaxed attitude toward myth and metaphysical theory: "If you meet the Buddha on the road, kill him." The Dalai Lama and other Buddhist teachers have cooperated with scientific researchers interested in measuring the effects
of meditation and studying the various supernormal powers supposedly possessed by Buddhist adepts. But even Buddhist openness has its limits.

Dr. Cherie Sutherland, a sociologist who has spent time investigating the near-death experience, tells an interesting story in this regard about a woman who was so traumatized by her NDE that she refused to discuss it with anyone for several years. Then she attended a Buddhist retreat and finally decided to open up to what she figured would be a receptive audience. At first, the Buddhists indeed proved to be both sympathetic and reassuring. Until, that is, the woman explained that, during her out-of-body experience, she left her body through the top of her head. No, she was politely but insistently told, that is impossible; only saints and gurus can do that. The rest of us leave the body by the feet. After all, what would be the point of all those years of meditation and practice if any poor slob could do what a guru can do? What indeed?

Religious theories, practices, and the mythologems (picture-language) in which they are inextricably embedded, inspire pristine devotion from their loyal adherents. On the other hand, the anomalous facts of our experience are like unruly children who can't keep a straight face while listening to the blathering platitudes of the pious.

I'll sit at the kids’ table any day.

The religious-based science of materialism ought to be replaced, not with Christian or Hindu creationism (or even by some newfangled New Age cosmology that makes use of up-to-the minute models such as the hologram), but with a genuinely scientific science: a discipline that is honestly empirical and thoroughly self-critical. Such an inquiry would be open at every moment not only to revising but also to abandoning its most basic and cherished theoretical beliefs. And it would certainly be open to the idea that something can be real without necessarily being material, quantifiable, controllable, or repeatable. (I would also like to see a truly scientific religion; but I can't go into that here.8)
Twilight of the Western

I was therefore decidedly unhappy to discover Cremo using the image of the Western showdown between Boss and Stranger to characterize the conflict between mainstream anthropology (and, by extension, mainstream science as a whole) and its various critics. His admirably inclusive membership list of cultural Strangers includes "creationists, cultural revivalists, religion-based sciences (especially Hindu-based), populist critiques of science, anomalists, and finally, the postmodern academic critics of science in the fields of sociology, history, and philosophy." But that's a real variety pack.

I strongly suspect that what distinguishes the members of this rather diverse group of dissenters from each other is, in the end, vastly more important than what unites them as the "perceived enemies" of the dogmatically orthodox mainstream. The situation is far more complicated than the simplistic Black-Hat versus White-Hat morality of the old Western. Is this image but one more symptom of an oversimplifying, reductionist mentality that Wilson has criticized as "an emotional gesture of despair in the face of complexity"?

Pardner, some of these gosh-durned Strangers might even turn out to be the rather nasty kind that Mother properly warned us against trusting.

For example, would a university run and staffed by clones of Christian fundamentalists like Pat Robertson, Jerry Falwell, and Robert Bork really be more intellectually free and open than one run by Carl Sagan clones? Think about it.

I have thought about it.

A couple of years ago, I was visiting a friend in the hospital. Occupying the adjacent bed was a kindly-looking, grey-haired, grandmotherly sort of woman who was enjoying a visit from her daughter. Mother was proudly telling Daughter about a young cousin who was attending a "good, Christian college." In hushed and almost apologetic tones, Mother leaned forward to whisper to Daughter that, even though he someday wanted to become a missionary, Cousin was interested in—of all things—anthropology and ancient history. "Yes," she said
reassuringly, leaning back into the comfort of her pillow, "but none of that billion or million-year stuff. Maybe ten thousand at most."

Carefully totaling up the generations of the Biblical "begats," Anglican Archbishop James Ussher (1581-1656) had calculated that Genesis occurred in 4004 B.C. Contemporary fundamentalists are now willing to concede that the world might be as old as ten thousand years or so. Now there's an open mind for you! Talk about progress.

Which is why it strikes me as rather strange (anomalous?) that Cremo, who is ardently pushing the case for "extreme human antiquity," is ready to make common cause against the scientific mainstream with fundamentalist Christian Creationists who must insist, all contrary evidence notwithstanding (including, of course, Cremo's own), that the world is no more than ten thousand years old—at most. Whereas science is, at least in principle (though not always in fact) open to self-correction, religion is not and cannot be. A "religious science" is what philosophers call a *contradictio ad adjecto*: a contradiction in terms.

Before we simply cast in our lot with Stranger in his heroic duel with Boss, then, we would be wise to consider whether the old saw that "The enemy of my enemy is my friend" is yet another moldy holdover from the days of religious wars and tribalism that ought to be junked, once and for all.

Perhaps we had all better lay down our arms before we shoot it out. It is the anomalies themselves that will suffer the most. Instead of allowing them to speak to us in their own terms, we will be too busy defending our own intellectual turf (read: pet theories) against all comers to listen to their voices. That will be a luxury we crack shootists cannot afford. Imagine that.

Strelnikov's train: an express to nowhere

Our imagination and the liberation thereof is, in fact, the key to the entire problem. Which is why I keep returning to Cremo's metaphor of the Western shootout. For if we have learned nothing else from the likes of the late Joseph Campbell, it is that metaphors matter. Especially when it comes to the symbolic imagery that we use in talking and thinking about those pivotal moments of revolutionary change in society and culture when everything, more or less, is
up for grabs. These are the historical moments in the biographies of both individuals and civilizations that Campbell often referred to as "transformations of consciousness."40

The image that springs readily to my own mind when I think of such moments is not a generic Western, but rather a very specific image from an old movie. It is the one scene of great visual economy and tremendous revelatory power in director David Lean's otherwise lugubrious and elephanteine film version of Boris Pasternak's novel of the Russian Revolution, Doctor Zhivago.

In my favorite scene, actor Tom Courtenay, who plays the mysterious Bolshevik revolutionary hero Strelnikov, is standing on the caboose of a train speeding through the Russian countryside. As he streaks past groups of ecstatic peasants basking in the glow of revolutionary fervor, the People raise their clenched fists in the air in salute to their liberator, shouting "Strelnikov!" in a paean of triumph and praise. But as the camera focuses in on Courtenay's steely cold, unrelenting stare, we can see in his eyes what is to come: The repressive, authoritarian, imperial Czardom is about to be replaced by a repressive, authoritarian—albeit collective—czardom. No sooner than it was cracked opened, the window of freedom will be slammed shut. Strelnikov's train is an express to nowhere, fast. What, indeed, is to be done?

This is an all-too-familiar pattern of history: the revolution betrayed by the very freedom-fighters who chafed under the injustices and restrictions of the old regime. From old System to new System; it's all the same except for the names. The King is dead; Long live the King! Exit the Shah of Iran and his dreaded secret police, SAVAK; enter the Ayatollah Khomeini and his morals police, fanning out in helicopters over Teheran in search of forbidden satellite dishes on rooftops. Boris Yeltsin, the quirky ex-commie who faces down the last Soviet tanks with a bullhorn and sheer chutzpah becomes Boris Yeltsin the drunken autocrat who sends the same ex-Soviet tanks to blow up the (more or less) freely-elected Russian parliament. And the beat goes on.

This recurring pattern of openness and closure, of gleefully letting go and anxiously holding on ever more tightly, is evident not only in politics, but also, to be sure, in religion. My
favorite example in Christianity (apart, of course, from that of the iconoclast Jesus, who was turned into the idol of Christ) is that of Saint Augustine.

You will recall from his autobiographical *Confessions* that, prior to his adult conversion to Christianity, Augustine spent about a decade as a member of the Manichee religion. The Persian prophet Mani was a syncretistic Gnostic who artfully combined elements of Zoroastrianism, Buddhism, and Christianity. He held that the soul was a spark of the Divine Light imprisoned in a dark, vile, gross, material body from which it must learn to escape. Stop eating meat, stop drinking wine, stop having sex. From the elegant poetry of the Orphic doctrine *Soma, sema* ("The body is a tomb") to the sheer inanity of the Heavens' Gate cult "liftoff" in Nike sneakers ("Just do it!" is the Nike slogan), the aim has been the same: salvation by renouncing and withdrawing from the material world.

This withdrawal is almost invariably pictured as an Ascension, a literal rising above the rabble of the Devil's Den (Planet Earth). Whereas the suicidal members of the Heaven's Gate UFO cult looked to the Hale-Bopp comet as the harbinger, if not the camouflaged vehicle, of their earthly release (they believed that the comet hid a UFO that would transport their souls—well, somewhere else), Mani held that the Moon was the intermediate gathering place and launching pad for the souls of the saved on their way to Heaven.

In fact, as Augustine tells us in the *Confessions*, Mani had a good deal to say, not only about the Moon, but about the cosmos in general. Yet, the more Augustine read, the more he came to believe that the religious science of the Manichees was little more than a collection of "tedious tales" that did not measure up to the work of the "secular scientists." Mani, he explains, "wrote at great length on scientific subjects, only to be proved wrong by genuine scientists."

"Yet," the future saint adds, "I was expected to believe what he had written, although it was entirely at variance and out of keeping with the principles of mathematics and the evidence of my own eyes." And so Augustine quit the Manichees in disgust. Three cheers for reason, experience, and plain common sense!
History, though, would have the last laugh. Centuries later, Augustine's own Church "pulled a Mani," so to speak, when the Inquisition demanded that Galileo recant his heliocentric cosmology because it was "expressly contrary to Holy Scriptures" as interpreted by "the Theological Qualifiers." Long before Mary Baker Eddy, there was a "Christian Science"—and neither religion nor science, as Campbell observed, has yet recovered from imbibing that intellectually poisonous concoction.

Paradigms lost

But we mustn't think that politics and religion have a monopoly on this sort of odd and unfortunate turnabout. As the late philosopher of science Thomas Kuhn demonstrated in his justly famous work, *The Structure of Scientific Revolutions* (1962), the history of science exhibits a similar pattern of openness and closure, or revolution and reaction.

Instead of the gradual, smooth, and steady climb towards Truth as envisioned by the Enlightenment thinkers, Kuhn saw the development of science as wildly oscillating back and forth between periods of "normal" and "revolutionary" activity. In periods of boringly "normal" or what Kuhn also called "puzzle-solving" science, scientists are content to work out piecemeal the implications of theories whose basic, underlying assumptions are left unquestioned. Then follows a period of crisis, in which certain persistent experimental or observational anomalies cannot be explained by the existing theoretical framework, which for Kuhn represents a total perspective, a way of seeing the world ("paradigm"). This crisis period is punctuated and resolved by a revolutionary cataclysm ("paradigm shift") in which most of the old-timers, clinging to an outworn perspective, are swept away by the (mainly youthful) adherents of a new and rival paradigm which can find a place, not only for the old paradigm, but for the hitherto neglected anomalies. So it is that the physics of Aristotle gives way to that of Newton; and from Newton to Einstein; and from Einstein to Werner Heisenberg, Niels Bohr, and David Bohm.

What typically happens after the revolution is revealed in an interesting anecdote about the rocky relationship between Einstein and Bohr told by none other than Bohm himself (who at one time had been a protegé of Einstein).
Einstein, of course, had exploded Newton’s idea of an absolute time or standard of motion when he formulated the principle of relativity in 1905. There is no moment that is the same for the entire universe; time is relative to speed. Then in 1927, Heisenberg had discovered the uncertainty principle, which stated that for subatomic particles such as electrons, it is impossible to simultaneously establish both speed and momentum. In other words, that it’s uncertain where they are, exactly. And therefore that terms such as "momentum" and "position" do not have absolutely clear and unambiguous meanings, but are relative to what the experimenter is interested in measuring.

Einstein could not accept this sort of relativity; fundamental scientific concepts could not be ambiguous. Whereas Bohr accepted the ambiguity and, according to Bohm, "began to feel that Einstein had turned in a reactionary way against his own, original revolutionary contributions to relativity and quantum theory." Things got so bad between Bohr and Einstein that they would not speak to one another when they found themselves at the same Princeton party. Each congregated with his coterie of students at opposite ends of the room.

Is this any way to run a revolution?

The owl of Minerva flies again

If Cremo’s "new consensus" merely restages the same old tired play in a new set of costumes, then I want my money back now. And I think the probability of a recurrence is fairly high if we allow some new form of "religious science" (Hindu, Christian, Buddhist, Perennial Philosophy, New Age) to replace the old form of religious science (reductionist materialism).

But can we be cured of this repetition compulsion? Can we, in other words, break free of the pattern altogether and establish, not simply a new system of thought, or what Kuhn called a new paradigm, but an entirely new and fundamentally creative way of relating to systems of thought and paradigms? An imaginative approach that will not suppress, or even merely tolerate, but actually welcome the discovery of anomalies and other freaks that upset the prevailing wisdom—whatever it happens to be?
The 19th century German philosopher G.W.F. Hegel once declared, in his usual cryptic fashion, that "The Owl of Minerva spreads its wings only with the falling of the dusk."³ In other words, Death is the great clarifier. We only come to grasp an historical epoch or a form of consciousness retrospectively, when it is over, finished, kaput. Or, as the late American philosopher Louis Mink put it, "We think forward but understand backward."⁴

Oddly enough, Hegel's epigram gives me some hope for the future. For if we can now clearly discern the true patterns of history, then we have arrived at what is at least potentially the most revolutionary revolution in human thought: the mother of all transformations of consciousness. We may finally achieve a redeeming glimpse of the proverbial light at the end of the long, dark tunnel of human history. Imagine that: Forbidden science will be forbidden no more.

NOTES
2Vallee, pp. 41-42.
4Cremo, pp. 94-95.
5This is the title of Chapter 2 in his important book Beyond the Outsider (1965).
7Cherie Sutherland, Within the Light (New York: Bantam, 1995), p. 182.
8I am presently at work on a book that deals precisely with this question.
9Wilson, p. 67.
13In his preface to The Philosophy of Right.