The Alien Factor

No evidence to support the Myth

By JAYANT V. NARLIKAR

IN 1991 I had a conversation with Carl Sagan when he visited Delhi for the Jawaharlal Nehru Memorial Lecture and the subject of extra-terrestrial intelligent beings inevitably came up. His reply to the above question was a resounding "no". Despite many reports of so-called alien visitations in exotic spacecrafts, he asked why has no one produced any object, big or small, that has come in these spaceships from outside the terrestrial environment.

Although the scientific community is divided on the issue of whether we are alone in the universe (*The Times of India,* July 3), most share Sagan's scepticism. Why?

What about the UFOs (Unidentified Flying Objects) that are reported and even glorified in the media from time to time? What about the notorious Bermuda Triangle where mysterious powers are believed to be at work? Or, what about the highly readable accounts by many authors claiming that the earth was inhabited by the aliens long time ago? Let us briefly examine these through the critical visors of the scientists to understand why they remain unconvinced.

Media Publicity

Since June 24, 1947, when Kenneth Arnold, a 32-year-old U.S. businessman piloting his own plane near Mt Ranier in the state of Washington, reported being followed by flying saucers, the sightings of UFOs have been receiving media publicity. There are also claims now and then that the U.S. Air Force, NASA and other official organisations know of alien visits to our planets, but are keeping the news classified in the interests of security. Strangely enough, even when the iron curtain was at its thickest, I knew of not many such claims accusing the erstwhile Soviet Union of suppression of news of these events.

The Arnold case was investigated in 1948 under Project Sign by the U.S. Air Force. Similar investigations were carried out later under Project Grudge in 1949, and project Blue Book initiated in 1952. The latter was wound up in 1969. The Rand Corporation was also asked by the U.S. Air Force to investigate the UFO cases on its behalf. Many UFO cases are or have been investigated by other organisations and also private individuals. The curious may like to peruse books like "UFOs Explained" by Philip Klass to see how the alien hypothesis gets debunked by scientific probes each time.

Instead, the following more mundane explanations emerge. Like mirages on the ground there are optical illusions in space and these create the impression of a UFO. A common illusion is provided by planet Venus near the horizon: it has been mistaken for a spaceship! If you keep looking at it as you move in a vehicle, it appears to track you ... stopping when you stop and moving when you move.

Since the advent of space age there have been numerous manmade satellites orbiting the earth. If they are spy satellites used for surveillance, their owners will be loath to disclose their identity and they remain classified as UFOs.

Fraud Cases

The various UFO investigators have also come upon unreliable witnesses some of whom had a history of mental aberration. Worse still, there are cases of out-and-out fraud. We are shown photographs of UFOs with the remark that a photograph cannot lie. But the person who took the photograph might very well do so. I am sure that with computers entering the photographic field, fake but authentic looking UFO photos are going to be easy to produce.

To sum up, then, prima facie, a UFO means no more than an unidentified flying object. While the media descriptions of UFO sightings can be very sensational, the idea that they are of extra-terrestrial origin has so far not withstood closer scientific scrutiny. But given that there is a scientific possibility of extra-terrestrial civilisations, and so long as science fiction presents absorbing scenarios of visits by aliens, popular expectation of a UFO meaning a spaceship coming from beyond the earth will continue to survive and grow.

If, as and when the aliens do land here on the terra firma, it will be frontline news. But what about claims that alien influences have already been operating in certain corners of the earth? The so-called Bermuda Triangle (sometimes also called the Devil's Triangle), for instance?

This triangle is a part of the Atlantic Ocean with vertices at Florida, Puerto Rico and Bermuda. It is claimed that ships and planes vanish without a trace in this area, clocks stand still, radar goes blank, etc., implying in no uncertain terms that mysterious (alien?) influences are at work. The effect on the reader is all the greater when told that government inquiries tend to suppress the real findings.

When subjected to scientific scrutiny, however, the reality is different. A careful analysis of the triangle incidents by Lawrence D. Kusche, a librarian at Arizona University, was published in a book entitled "The Bermuda Triangle Mystery Solved". Kusche's conclusions as well as those of other investigators are that the descriptions are either factually distorted, or hyped to make the ordinary appear incredible.

Not surprisingly, the debunking has not gained as much publicity or popularity as the original accounts. The lay reader likes to read about mysteries, about the uncanny and feels let down when told that it is all commonplace. Try telling a Hercule Poirot fan that the murder did not take place at all; or a Sherlock Holmes buff that there was no hound in the Hound of the Baskervilles! But the serious difference between these examples and the Bermuda Triangle is that Hercule Poirot and Sherlock Holmes were imaginary characters whereas the triangle incidents are made out to be real.

And, as for the frequency of strange disappearances, statistics show that the triangle area is no different from any other part of the world where ships and planes are lost without trace through accidents. As one science writer put it, even in a civilised and well governed country like Britain, more than a thousand persons annually disappear without a trace. Surely we are not implying that aliens are there on a kidnapping spree!

Popular Literature

There is another class of popular literature that seeks to make a persuasive case that we humans are not the first intelligent inhabitants of the earth. Starting from folklore about gods and other superhuman species, many authors draw evidence from ancient relics in South America, Egypt, India and other parts of the world that technologically advanced civilisations of alien nature once ruled this planet. They were wiped out by some natural catastrophe as the dinosaurs were. Or, there may be other reasons why that high technology has not survived to this day.

Judging by the questions I am asked on this topic the typical reader of such accounts accepts them uncritically. I have myself found them absorbing to read but they stop short of providing that germ of hard scientific proof that might have lent them credibility. The authors and readers of such stories, however, seem to think that rather than the burden of proof lying on the narrators of such accounts the burden of disproving them lies on the scientific community.

Scientists have other more pressing matters on their agenda. To the extent that such cases have been investigated they are found to be hyped as in the cases of the Bermuda Triangle or marred by defects in deductive reasoning. To sum up, then, the notions that aliens were here, are already here, or they visit us now and then are fascinating to speculate on and read about, they might even be true, but todate there is no hard scientific evidence for them.