

SR/Research SCIENCE & HUMANITY



DEPARTMENTS: Research in America • Letters to the Science Editor

RESEARCH IN AMERICA

WHAT ARE THE UNIDENTIFIED AERIAL OBJECTS?

HE opening chapter of *The Book* of the Prophet Ezekiel reports a strange event in "the land of the Chaldeans by the river Chebar . . . in the fifth day of the month, which was the fifth year of king Jehoiachin's captivity." The St. James translation of Ezekiel's words runs as follows:

And I looked, and, behold, a whirlwind came out of the north, a great cloud, and a fire infolding itself, and a brightness was about it, and out of the midst thereof as the colour of amber, out of the midst of the fire.

Also out of the midst thereof came the likeness of four living creatures. And this was their appearance; they had the likeness of a man.

And every one had four faces, and every one had four wings.

And their feet were straight feet; and the sole of their feet was like the sole of a calf's foot: and they sparkled like the colour of burnished brass.

And they had the hands of a man under their wings on their four sides; and they four had their faces and their wings.

Their wings were joined one to another; they turned not when they went; they went every one straight forward.

As for the likeness of their faces, they four had the face of a man, and the face of a lion, on the right side: and they four had the face of an ox on the left side; they four also had the face of an eagle.

Thus were their faces: and their wings were stretched upward; two wings of every one were joined one to another, and two covered their bodies.

And they went every one straight forward: whither the spirit was to go, they went; and they turned not when they went.

As for the likeness of the living creatures, their appearance was like

burning coals of fire, and like the appearance of lamps: it went up and down among the living creatures; and the fire was bright, and out of the fire went forth lightning.

And the living creatures ran and returned as the appearance of a flash of lightning.

Now as I beheld the living creatures, behold one wheel upon the earth by the living creatures, with his four faces

The appearance of the wheels and their work was like unto the colour of a beryl: and they four had one likeness: and their appearance and their work was as it were a wheel in the middle of a wheel.

When they went, they went upon their four sides; and they turned not when they went.

As for their rings, they were so high that they were dreadful; and their rings were full of eyes round about them four.

And when the living creatures went, the wheels went by them: and when the living creatures were lifted up from the earth, the wheels were lifted up.

Whithersoever the spirit was to go, they went, thither was their spirit to go; and the wheels were lifted up over against them: for the spirit of the living creature was in the wheels.

ACCORDING to Ezekiel's account of the happening, he was so thoroughly awed and frightened that he "fell upon my face." While prone, he "heard a voice of one that spake" and a short while later "I heard also the noise of the wings of the living creatures that touched one another, and the noise of the wheels over against them, and the noise of a great rushing." Finally, he was lifted up and taken away to a place by the Chebar where he "sat... astonished... seven days."

Ezekiel claimed that he had been in the hands of God, and that since Ezekiel was an inconspicuous priest at the time, the landing of the winged wheels carrying a voice was simply God's way of dramatizing Ezekiel's appointment as "a watchman unto the house of Israel." Successive translators of the Bible have accepted Ezekiel's adventure as a visionary one. But another and quite different interpretation of Ezekiel's experience, made long afterwards, was given prominence in a book published last year by Henry Regnery Company under the title: Anatomy of a Phenomenon. The author, French-born mathematician Jacques Vallee, while taking no firm position of his own on the matter, quoted from without disapproving modern "books dealing with unidentified flying objects" which find some of Ezekiel's expressions "similar to those commonly used by witnesses of modern sightings of UFOs." One passage cited by Vallee reads:

"Ezekiel's narrative in the *Bible* is mainly concerned with describing this incident in his own phraseology, however vague it may seem to us today. Ezekiel lived in an era of few metals and no machines. The war chariot and the plough were the last words in their 'technology.' For this reason it was extremely difficult for Ezekiel to portray . . . the event . . . with his vocabulary."

Vallee's own text proceeds:

"According to the same sources, an attempt to reconstruct from Ezekiel's words a model of the phenomenon in modern terms would lead to a conception of a machine rather than a natural phenomenon such as a mirage:

"The vehicle which Ezekiel observed had four distinct pillars. From each pillar protruded two wings, eight in all,

which moved about. At the base of each column there were rings with circular openings. The four columns formed a cubic body over which there was a transparent dome. For lack of any better term Ezekiel defined it as a "firmament." A throne of sapphire stone crowned the dome, encircled by a rainbow. The reference to sapphire, amber, crystal, and beryl may be allusions to plastics which certain parts of the ship were made of.

"The prophet describes the workings of this extraordinary craft. Except for the wings no other parts moved. The wings produced a sound "like the noise of great waters." A fiery and thunderous exhaust issued from the base of the engine.

"The incident is so objectively depicted that it could hardly be considered a tale to impress superstitious listeners."

■T is only in recent times that astronomers have come to believe that beings with intelligence equal or superior to that of earthly men must inhabit hundreds if not thousands of planets of stars other than our sun (see SR, Jan. 2, 1960). If Ezekiel had been the unwitting agent of a distant civilization that discovered planet earth and considered earthmen degenerate, it would be logical to assume that his principals had been observing earth for a long time. A still more recent book than mathematician Vallee's-this one, written jointly by Russian astronomer I. S. Shklovskii and Harvard astronomer Carl Sagan, is titled Intelligent Life in the Universe and published by Holden-Day-explores the implications such observations may have for our earthly past and future. The text of Intelligent Life in the Universe points out:

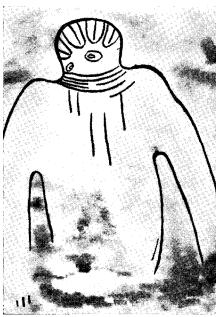
Some 25,000,000 years ago, there existed a creature named Proconsul who was probably ancestral both to Homo sapiens and to the great apes. Proconsul was erect, bipedal, and toolusing. The subsequent evolution in the line of man has been marked, as all evolutionary tracks are, by fits and starts and dead ends. We see, for example, the late Parenthropus, late Java man, and late Neanderthal man all represent evolutionary dead ends. They were intelligent, communicative, and probably had their own simple cultures, but they left no issue. Had the physical environment been slightly different, had the accidents of daily existence occurred another way, Homo sapiens might have been an evolutionary dead end, and perhaps today there would have been a technical civilization of Pithecanthropi on the planet earth; or perhaps no civilization at all.

But these matters, while difficult for us to reconstruct from a distance of millions of years, would have been much clearer to a technical civilization greatly in advance of the present one

on earth, which visited us every hundred thousand years or so to see if anything of interest was happening lately. Some 25,000,000 years ago, a Galactic survey ship on a routine visit to the third planet of a relatively common G dwarf [star, the sun] may have noted an interesting and promising evolutionary development: Proconsul. The information would have filtered at the speed of light slowly through the [Milky Way] Galaxy, and a notation would have been made in some central information repository, perhaps at the Galactic center. If the emergence of intelligent life on a planet is of general scientific or other interest to the Galactic civilizations, it is reasonable that with the emergence of Proconsul. the rate of sampling of our planet should have increased, perhaps to about once every 10,000 years. At the beginning of the most recent postglacial epoch, the development of social structure, art, religion, and elementary technical skills should have increased the contact frequency still further. But if the interval between sampling is only several thousand years, there is then a possibility that contact with an extraterrestrial civilization has occurred within historical

Shklovskii and Sagan agree that "there are no reliable reports of direct contact with an extraterrestrial civilization during the last few centuries, when critical scholarship and nonsuperstitious reasoning have been fairly widespread." They classify as "highly debatable" the postulations of Soviet ethnologist M. M. Agrest that representatives from an extraterrestrial civilization visited earth in the more distant past. "Although certain claims have been made from time to time, no known ancient artifacts have been unambiguously connected with a cosmic visit," the two astronomers declare. "Much commotion was made over the discovery of the image of a 'Martian god' complete with space suit, found in cliffs overlooking the Sahara. It transpired that these Tassili frescoes represented, in fact, an ordinary human being in a ritual mask and costume. The press tends to exaggerate and over-publicize such matters. Such publicity is due, of course, to widespread popular interest in the possibility of contact with intelligent extraterrestrials. But for this very reason, we must examine critically any purported artifacts uncovered."

ONE historical episode Professor Sagan does feel is worthy of further analysis in relation to the possibility of contact between earthmen and ambassadors from the planets of other stars. That is the story of the Sumerian people. Sumer, he reminds, "was an early—perhaps the first—civilization in the contemporary sense on the planet earth. It was founded in the fourth millennium B.C. or



-From "Intelligent Life in the Universe."

One of the 6000 B.C. frescoes at Tassili-n-ajjer in Africa.

earlier. We do not know where the Sumerians came from. Their language was strange; it had no cognates with any known Indo-European language, and is understood only because a later people, the Akkadians, compiled extensive Sumerian-Akkadian dictionaries." Sagan goes on:

The successors to the Sumerians and Akkadians were the Babylonians, Assyrians, and Persians. Thus the Sumerian civilization is in many respects the ancestor of our own. I feel that if Sumerian civilization is depicted by the descendants of the Sumerians themselves to be of nonhuman origin, the relevant legends should be examined carefully. I do not claim that the following is necessarily an example of extraterrestrial contact, but it is the type of legend that deserves more careful study.

Taken at face value, the legend suggests that contact occurred between human beings and a nonhuman civilization of immense powers on the shores of the Persian Gulf, perhaps near the site of the ancient Sumerian city of Eridu, and in the fourth millennium B.C. or earlier. There are three different but cross-referenced accounts of the Apkallu dating from classical times. Each can be traced back to Berosus, a priest of Bel-Marduk, in the city of Babylon, at the time of Alexander the Great. Berosus, in turn, had access to cuneiform and pictographic records dating back several thousand years before his time.

Sagan next quotes, from the 1876 revised edition of Cory's Ancient Fragments, Greek and Latin translations of the three separate accounts he mentions: those of Alexander Polyhistor, Abydenus, and Appolodorus. There is space here only for the Polyhistor version:

Berosus, in his first book concerning the history of Babylonia, informs us that he lived in the time of Alexander, the son of Philip. And he mentions that there were written accounts preserved at Babylon with the greatest care, comprehending a term of fifteen myriads of years. These writings contained a history of the heavens and the sea; of the birth of mankind; also of those who had sovereign rule; and of the actions achieved by them.

And, in the first place, he describes Babylonia as a country which lay between the Tigris and Euphrates. He mentions that . . . the part of Babylon which bordered upon Arabia was barren, and without water; but that which lay on the other side had hills, and was fruitful. At Babylon there was (in these times) a great resort of people of various nations, who inhabited Chaldea, and lived without rule and order, like the beasts of the field.

In the first year there made its appearance, from a part of the Persian Gulf which bordered upon Babylonia, an animal endowed with reason, who was called Oannes. (According to the account of Apollodorus) the whole body of the animal was like that of a fish; and had under a fish's head another head, and also feet below, similar to those of a man, subjoined to the fish's tail. His voice, too, and language was articulate and human; and a representation of him is preserved even to this day.

This Being, in the daytime used to converse with men; but took no food at that season; and he gave them an insight into letters, and sciences, and every kind of art. He taught them to construct houses, to found temples, to compile laws, and explained to them the principles of geometrical knowledge. He made them distinguish the seeds of the earth, and showed them how to collect fruits. In short, he instructed them in everything which could tend to soften manners and humanize mankind....

SAGAN emphasizes that Polyhistor, Abydenus, and Appolodorus all chronicle the same "remarkable sequence of events. Sumerian civilization is depicted by the descendants of the Sumerians themselves to be of nonhuman origin. A succession of strange creatures appears over the course of several generations. Their only apparent purpose is to instruct mankind. Each knows of the mission and accomplishments of his predecessors. . . . The straightforward nature of this account of contact with superior beings is notable. Oannes and the other Apkallu are described variously as 'animals endowed with reason,' as 'beings,' as 'semi-daemons,' and as 'personages'—never as gods."

At one time archeological and anthropological evidence indicated strongly that the Sumerian civilization crystallized out of chaos virtually overnight. So precipitate a change would tend to support the speculation that Sumerian knowledge came full blown from a superior source of wisdom. More modern research suggests that Sumerian civilization developed over a long period, lessening the probability of a sudden visitation from a "teaching" culture far-off. Clay cylinders bearing likenesses that seem to corroborate the myth of extraterrestrial contact (see sketch on this page) may therefore be, Sagan concedes, "nothing more than the experiments of the ancient unconscious mind to understand and portray a sometimes incomprehensible, sometimes hostile environment. The stories of the Apkallu may have been made out of whole cloth. perhaps as late as Babylonian times, perhaps by Berosus himself. But stories like the Oannes legend, and representations especially of the earliest civilizations on the earth, deserve much more critical studies than have been performed heretofore, with the possibility of direct contact with an extraterrestrial civilization as one of many possible alternative interpretations."

Despite the apparent absence of identifiable evidence. Sagan insists it is statistically possible "that the earth has been visited by various Galactic civilizations many times (possibly about 10,000 during geological time). It is not out of the question even that some kind of base is maintained within the solar system to provide continuity for successive expeditions. Because of weathering and the possibility of detection and interference by the inhabitants of the earth, it might have appeared preferable not to erect such a base on the earth's surface. The moon seems one reasonable alternative site for a base. The cosmic visitors would probably reason that by the time man had developed the technology to explore the far side of the moon, he would also have attained a certain limited degree of



-From "Intelligent Life in the Universe."

Detail from a Sumer cylinder: fish-headed and -footed man.

advancement and might be called civilized. Forthcoming high-resolution photographic reconnaissance of the moon—particularly, of the back side—from space vehicles might bear these possibilities in mind."

■ HAVE followed Professor Sagan's historical approach to the contemporary controversy over unidentified aerial objects (more often and more dubiously called "unidentified flying objects," or UFOs) because of his unique position in the argument. He is the only nonmember of the U.S. Air Force Scientific Advisory Board who sat on the 1966 ad hoc committee that board assigned to review Air Force handling of UFO sightings. The ad hoc committee after an allday meeting last February unanimously concurred in three major conclusions: 1) "In the nineteen years since the first UFO was sighted there has been no evidence that unidentified flying objects are a threat to our national security;" 2) "In nineteen years and more than 10,000 sightings recorded and classified, there appears to be no verified and fully satisfactory evidence of any case that is clearly outside the framework of presently known science and technology;" 3) "Although the resources assigned to it have been quite limited (only one officer, a sergeant, and a secretary) ... the present Air Force program dealing with UFO sightings has been well-organized." Taken together, these conclusions plainly do not support the accusation that the Air Force, or a faction within it, has conspired to withhold from the American people information about the arrival on earth of emissaries from civilized peoples on other planets. Contrariwise, the committee findings do not preclude the possibility of extraterrestrial visitations and do include recommendations that the Air Force "provide opportunity for scientific investigation of selected sightings in more detail and depth than has been possible to date" in order not to close off any chance "that analysis of new sightings may provide some additions to scientific knowledge."

On page 50 of this issue of SR, Professor Sagan vividly expresses his doubts about the reality of "flying saucers." And at still another place (see page 44), SR TRADE WINDS columnist John G. Fuller reports at second hand a modern echo of the Ezekiel experience. These are the two extremes of the current UFO debate.

Since Incident at Exeter, Fuller's book on the subject, has been advertised as "the book that will cause the Air Force to admit that UFOs are real," many people assume that the assembling of the Air Force Scientific Advisory Board committee referred to above was provoked by the claims of sixty people that they had seen one or more UFOs out-

side the town of Exeter, New Hampshire. This assumption is wrong. The Exeter episode occurred in September 1965, one month after the Public Information Office of the Air Force wrote a letter that led to the convening of the Scientific Advisory Board ad hoc committee. I have seen that letter. It was not written in pursuit of any unidentified aerial object. A known research balloon had gone astray high in the atmosphere and had been floating on the winds over the midwestern states for days, bringing insistent calls from curious newsmen. PIO asked Air Force Operations to help in telling a more complete story on such matters to the press, and Operations bucked the letter back; only if the scientists could produce more information would there be more information to pass on to the papers.

Incident at Exeter raised several serious questions. One was the possibility that the recent electric power blackout in the northeastern United States, and similar blackouts elsewhere in the country, were due to electromagnetic effects of UFOs. I cannot find an electrical or electronics engineer who accepts this idea, Incident at Exeter also alleged that the Air Force surrounds UFO information with secrecy. Perhaps columnist Fuller had some unfortunate experiences in this regard, but I was granted access to all UFO reports except one. The exception was the Robertson panel report of 17 January 1953. The text of it, I was told, was classified because the panel had been called at the request of the Central Intelligence Agency. At my own request, the Air Force asked CIA to declassify the Robertson report text; as these words are written, no reply has been received. In absence of the text, however, the Air Force has given me a summary of the report, which reads as follows:

- 1. The undersigned Panel of Scientific Consultants has met at the request of the Government to evaluate any possible threat to national security posed by Unidentified Flying Objects ("Flying Saucers"), and to make recommendation. The Panel has received the evidence as presented by cognizant Governmental agencies, primarily the United States Air Force, and has reviewed a selection of the best documented incidents.
- 2. As a result of its considerations, the Panel concludes:

That the evidence presented on Unidentified Flying Objects shows

A REPORT OF A HYPNOTIC EPISODE WITH A UFO IN

EVERAL people called from Exeter to report that an unusual case had broken in the Boston and New Hampshire papers involving a highly respected couple who had encountered a UFO at close quarters back in 1961, and who had been so traumatically shattered by the experience that they had had to undergo hypnoanalysis by one of the highest ranking medical psychiatrists in Boston in order to repair the damage they had suffered. I had heard of this case from the Exeter police but had not followed it up because I was confining my research strictly to recent cases.

Although I was resolved to keep to plan, I felt it necessary to explore a development resulting from this case, which was that the couple had decided to speak at a meeting at the Pearce Memorial Unitarian-Universalist Church in Dover, New Hampshire, on November 7, 1965, breaking a long silence they had observed because they did not want publicity or ridicule that might accrue from the exposure of their story, Since the New England press had broken the story, they wanted to correct any misconceptions arising from the newspaper accounts, and had agreed to speak on invitation from the church.

I was to learn later of an interesting angle of that invitation. Lt. Alan Brandt, a public information officer at the Pease Air Force Base, was a member of the church, and had helped arrange the meeting. Perhaps this was significant. I learned by phone that it was just possible that the Air Force was unofficially permitting a story to leak out. But this was pure speculation. . . .

Under separate hypnosis, I learned, [the couple who were to speak—Mr. and Mrs. Barney Hill], both penetrated a period of amnesia which had lasted for two hours following the UFO landing next to their car. Under hypnosis, they related that they had been taken aboard the strange craft, assured that they would not be harmed, given a physical examination by a group of humanoid creatures, and released with the assurance that they would have no conscious memory whatever of the experience.

The sessions were taped by the psychiatrist, then funneled slowly back to the conscious minds of the couple as the therapy progressed. The technique was successful in eliminating the dreams and nightmares both husband and wife had suffered following the experience. But neither Mr. nor Mrs. Hill made any claim as to the validity of what they had related to the psychiatrist under hypnosis. They had told close friends only that this was what had come out on the tapes, accounting for two hours which had mysteriously disappeared from an evening in their lives.

The story had broken in the papers, four years after the event, through a meeting of the Hills with technical people interested in the UFO portion of the story. The Hills had spoken at this session at the request of Walter Webb, a member of the staff of the Hayden Planetarium in Boston. It was the first time the couple had mentioned the episode to any but their closest friends. They were acutely sensitive to adverse publicity because Barney Hill, a leader in the New Hampshire National Associ-

ation for the Advancement of Colored People, was a Negro; his wife Betty, a social worker for the state of New Hampshire, was white. Partners in a mixed marriage, they knew that involvement with a sensational story like this could have damaging results because of the prejudices within the population.

Both Hills were extremely intelligent, and highly regarded. Barney Hill had received citations and awards for his community work from both the Governor of New Hampshire and Sargent Shriver. Betty Hill was a dedicated social worker, whom the Exeter police said was unflagging in her work to help the poor. The psychiatrist involved was an outstanding medical man, known throughout the world for his accomplishments in the neuropsychiatric field.

It was a complex, bizarre story. However, because it was four years old, I resolved to confine myself to the church meeting. . . .

I was surprised to see that Lieutenant Brandt, the public information officer at Pease AFB, was on the speaker's platform in his Air Force uniform. It indicated that there was at least tacit Air Force approval of his being a speaker at the meeting, but whether or not it suggested that the Air Force was ready to leak out UFO news at a meeting like this, or test public reaction, no one could tell,

Lieutenant Brandt's introductory speech was certainly vague and unilluminating. He merely reviewed the Air Force policy on UFOs as expressed in its own handbook, without any further elaboration. He did indicate that the Air Force took UFO sightings seriously