Unidentified Flying Objects in Classical Antiquity

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UNIDENTIFIED FLYING OBJECTS IN CLASSICAL ANTIQUITY*

Abstract: A combined historical and scientific approach is applied to ancient reports of what might today be called unidentified flying objects (UFOs). Many conventionally explicable phenomena can be weeded out, leaving a small residue of puzzling reports. These fall neatly into the same categories as modern UFO reports, suggesting that the UFO phenomenon, whatever it may be due to, has not changed much over two millennia.

Throughout recorded history, reports of what we today might call unidentified flying objects have been made and preserved. If more information were available to us, we would perhaps find that conventional scientific hypotheses could explain most, if not all of these.[1] Certainly this has turned out to be true of most reports from better-documented periods. There nonetheless remains a small residue of puzzling accounts, and regardless of what interpretation one places on them, these constitute a phenomenon that spans centuries of time and widely different cultures.

What may surprise the serious student of the subject is that, despite the numerous articles and books published by scientists on UFOs over the past six decades, almost no scholarly studies of the very early history of the phenomenon have appeared. What little has been accomplished was initiated in 1953 by the astronomer Donald Menzel's naturalistic interpretation of reports in Pliny the Elder's *Natural History*.[2] Menzel's study, however, proved superficial, and had the unfortunate consequence of inducing UFO enthusiasts to compile long, uncritical lists of all kinds of phenomena seen in the ancient skies and call them UFOs.[3] Their methodology was roundly

* I acknowledge an interesting conversation with J. Allen Hynek many years ago, and record also my indebtedness to the Columbia University libraries and the New York Public Library. The final form of this paper owes much to the extensive and critical suggestions of S. Douglas Olson and two anonymous referees.

[1] Mythological and biblical literature has been repeatedly ransacked for evidence of UFOs; see, e.g., Jessup (1956); Le Poer Trench (1960). Skeptical views were first expressed by the astronomer Menzel (1953) 124–34, and the psychologist Jung (1958) 79–84.

[2] Menzel (1953) 118–19.

[3] Wilkins (1954) 163–74; Drake (1977). Other popularizing authors have generally followed, directly or indirectly, Wilkins and Drake.

criticized in the 1968 Condon Report by Samuel Rosenberg, who did not, however, attempt a fresh start by tracking down and analyzing the primary sources themselves. Richard Wittmann, ignoring these authors, produced in 1968 a more scholarly, but also more restricted study of ancient "flying shields." The subject has languished since 1971 and 1975, when Peter Bicknell published two cautious articles in which UFOs were treated only incidentally.[4]

The most liberal attitude would allow that, to an ancient observer, many aerial phenomena were mysterious and hence to some extent unidentified, despite the observer's ability to describe them in familiar subjective terms and despite ancient attempts at theorizing about their nature. Today we can filter out the most obvious cases of conventional phenomena, in spite of the archaic terminology used to describe them. The approach adopted here will be to search for aerial phenomena in the more reliable ancient reports that look like modern UFOs, but without ignoring other manifestations of "strangeness." My working hypothesis will be that most such reports can be explained by conventional scientific ideas and that, among all the reports, only those that defy reasonable interpretation after full analysis can be said to resemble the most puzzling reports made today.[5]

Preliminary screening is relatively easy, thanks to a number of studies of sky phenomena reported in classical antiquity, most famously solar and lunar eclipses, whose reported times and paths can be compared with modern calculations, and comets and new stars (novae), which can be checked against independent observations by Chinese imperial court astronomers. Aurorae too have been inferred from Greek and Roman reports of "chasms," "sky fire," "night suns" and the like; statistical analyses of the times of occurrence of these phenomena during the well-documented interval 223–91 BC show agreement with the modern auroral periodicity of about 11 years, as well as with the modern clustering into two temporal peaks within auroral cycles. Even rare phenomena such as the aerial lights that occasionally accompany earthquakes can be identified in some cases. After large volcanic eruptions, the sun for a few years appears dim, red and sometimes haloed on account of aerosols injected into the stratosphere; these optical phenomena too crop up in ancient reports and can be correlated with modern measurements of aerosol fallout in dated polar ice cores.[6] Mock suns and mock moons have not been

[4] Wittmann (1968); Rosenberg (1969); Bicknell (1971) and (1975).

[5] Modern UFO cases date from 1945–1947, when a wave of sightings triggered a media frenzy. Vallee (1965) has discussed a number of similar cases from the 19th and early 20th centuries; his collection was foreshadowed by the work of Fort (1941).

[6] Eclipses: Ginzel (1899); Boll (1909); Schove and Fletcher (1984); Stephenson (1997). Comets: Gundel (1921); Barrett (1978); Ramsey (2006). New stars: Stothers (1977).

systematically cataloged, but are infrequently recorded and tend to be obvious, owing to their characteristic appearance in pairs. This leaves unusual fireballs, daytime and nighttime disks and the like, and rains of various material, all of which require further analysis.

For presentation purposes, I group the ancient reports in four categories as defined by Hynek for modern UFO sightings (but omitting radar detections), although I have combined Hynek's Nocturnal Lights and Daylight Disks into a single category, which I call Distant Encounters. I have accepted as separate categories his Close Encounters of the First, Second and Third Kinds, which are differentiated according to proximity, material remains and the presence of "occupants."[7]

A brief description of modern UFO sightings may be helpful at this point.[8] Although UFOs vary in morphology and behavior, consistent patterns have emerged. At close range, UFOs appear as disks or other extended objects, including vertical cylinders enveloped in "clouds" and associated with smaller disks. Depending on the viewing angles, their intrinsic shapes might be similar or even identical: a disk seen face-on looks circular, although edge-on it looks elliptical or oblong. Colors in the daytime are usually described as silvery or gray, and in the night as resembling red or multicolored lights. Estimated dimensions range from about one meter to hundreds of meters, with the scatter being probably intrinsic. UFOs are usually said to be noiseless. They are seen in the air or on the ground, hovering or stationary, or moving across the sky in a continuous fashion, even if erratically. Sometimes they suddenly appear or vanish.

A. Distant Encounters

Ideally, ancient Distant Encounters would be separated into nighttime and daytime categories, but this is possible in only a few instances. I have instead designated two objective subgroups, depending on whether the objects are described in military language, as types of "flying armaments," or in meteorological and astronomical

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Aurorae: Stothers (1979a) and (1979b); Solow (2005). Earthquake lights: Stothers (2004). Volcanic effects on the atmosphere: Hammer et al. (1980); Stothers and Rampino (1983); Stothers (2002). Scientific methods applied to the ancient prodigy lists are a relatively new weapon in the arsenal of textual controls.

[7] Hynek's (1972) is the only classification system having widespread familiarity, and this is just as well, since Vallee's (1965) earlier system, which he continually refined, is too elaborate for use in the case of the relatively simple ancient reports.

[8] My description summarizes the patterns discerned and discussed by the Vallees (1965), (1966) and (1990); Hynek (1972). A convenient summary of known luminous sky phenomena with which these puzzling cases have been compared can be found at Altschuler (1969).

language, as various kinds of "fiery globes." Within each subgroup the incidents are treated in chronological order.

Flying Armaments

Most reports of flying armaments come from Livy's prodigy lists, which for the years preceding *ca.* 123 BC were derived (perhaps indirectly) from the *Annales Maximi* published by the Pontifex Maximus of Rome. In view of the time-consuming and costly procedures required by the Roman authorities to investigate witnesses, verify claims and physical evidence, and expiate the more unusual portents, most modern scholars who have troubled to analyze the prodigy lists have come to regard them as trustworthy and accurate.[9] The unavoidable limitations are that the reporting area is restricted to central Italy, while the number of reports tends to mirror prevailing social conditions; regrettably, the reports are always very terse. The military terminology reflects the most advanced technology known at the time, a tendency found also in modern UFO reports, in which a witness gropes for a familiar technical vocabulary—and perhaps a rationalization—to describe an unaccountable phenomenon. That many reports were made during wartime may partially explain the military terminology.

The following three reports were made under the considerable pressure of the Second Punic War, when prodigies were most likely sought more frequently and carefully than usual. The observers are unknown, but were probably many in number, which may account for the spike in prodigy reports at this time. No compelling reason exists to infer an epidemic of mass hallucination in central Italy, although Livy did note a measure of mass hysteria, and even hysterical contagion, among the populace because of the looming Carthaginian threat.[10]

• At Rome in the winter of 218 BC "a spectacle of ships (*navium*) gleamed in the sky" (Liv. 21.62.4). Franklin Krauss, for lack of an alternative explanation, speculated that the "ships" were clouds or mirages, although suggestive cloud formations had been long-understood, familiar features.[11]

[9] See n. 6, above; Krauss (1930).

[10] It did not escape the shrewd notice of Liv. 21.62.1 and 24.10.6 that the increased number of prodigy reports generated at this time was a sociological consequence of the many reports that had already been made and publicized, as well as a psychological product of fear caused by the war with Carthage. Although Livy voiced skepticism about some of these reports, he did not specify which ones he doubted.

[11] Krauss (1930) 79. Cloud forms when imaginatively interpreted were generally recognized in antiquity to be psychological projections: Ar. *Nu.* 346–57; Lucr. 4.129–42; Cic. *Div.* 2.49; Theophanes Confessor AM 5870.

• In 217 BC "at Arpi round shields (*parmas*) were seen in the sky" (Liv. 22.1.9; Orosius 4.15). A *parma* was a small round shield made partly or wholly of iron, bronze or another metal; we do not know whether the luster of these devices (and not just their shape) was intended to be an element of the description. Mock suns are an unlikely explanation, since in the Roman prodigy lists these were routinely described as "double suns" or "triple suns" (i.e. two mock suns on either side of the real one).

• In 212 BC "at Reate a huge stone (*saxum*) was seen flying about" (Liv. 25.7.8). The implication would seem to be that the object in question was a stony gray color; that it is said to have moved irregularly (*volitare*) leaves open the possibility that the object Livy describes was a bird or some kind of airborne debris.

Sporadic reports of similar objects continue to appear after this in the Roman prodigy lists. The immediate sources are again Livy and his extractors Pliny, Plutarch, Obsequens and Orosius:

• In 173 BC "at Lanuvium a spectacle of a great fleet was said to have been seen in the sky" (Liv. 42.2.4).

• In 154 BC "at Compsa weapons (*arma*) appeared flying in the sky" (Obsequens 17). The term refers to defensive weapons, especially shields.

• In 104 BC "the people of Ameria and Tuder observed weapons in the sky rushing together from east and west, those from the west being routed." Thus Pliny (*Nat.* 2.148) who uses the term *arma*; Obsequens' (43) version is essentially the same. Plutarch (*Mar.* 17.4) calls the weapons "flaming spears and oblong shields," but may be merely glossing and expanding; since he noted the time as night, the phenomenon in question might be the streamers of an aurora borealis.

• In 100 BC, probably at Rome, "a round shield (*clipeus*), burning and emitting sparks, ran across the sky from west to east, at sunset." Thus Pliny (*Nat.* 2.100), although Obsequens (45) called the phenomenon "a circular object, like a round shield." The *clipeus* was a round shield similar to the *parma*, but bigger. Seneca (*Nat.* 1.1.15; 7.20.2), quoting Posidonius (1st century BC), referred to a class of *clipei flagrantes*, saying that they persisted longer than shooting stars.[12]

[12] Possibly related to these are the *disceus* comets, which displayed electrum-colored disks surrounded by scattered rays; see Plin. *Nat.* 2.89; Avienus in Serv. *Aen. ad* 10.272; Campestris in Scholiast to Luc. *ad* 1.529 and in Lyd. *Ost.* 15; Apuleius in Lyd. *Ost.* 10; *Mens.* 4.71; Heph. Astr. 1.24. See also Fuhr (1982) on the Typhon comet, which was twisted like a red coil (Plin. *Nat.* 2.91).

Nothing in the ancient reports forbids that these were spectacular bolides (meteoric fireballs), which move across the sky more slowly than ordinary shooting stars, but enormously faster than genuine comets, which are seen for days or weeks.[13]

• In 43 BC at Rome "a spectacle of defensive and offensive weapons (*armorum telorumque species*) was seen to rise from the earth to the sky with a clashing noise."[14] It might be possible to visualize in this report a bolide exploding while rising above the horizon.

• Historically, the most famous "sky army" appeared in the spring of *ca.* AD 65 over Judea. The historian Josephus reports:

> On the 21st of the month Artemisium, there appeared a miraculous phenomenon, passing belief. Indeed, what I am about to relate would, I imagine, have been deemed a fable, were it not for the narratives of eyewitnesses and the subsequent calamities which deserved to be so signalized. For, before sunset throughout all parts of the country, chariots were seen in the air and armed battalions hurtling through the clouds and encompassing the cities.[15]

Although Josephus probably viewed this phenomenon himself and apparently did research on it, he appeals to eyewitness accounts to bolster his credibility. The phenomenon does not seem to have been an aurora, cloud patterns or meteors, but does resemble the "aerial fighting" of modern UFOs.

Fiery Globes

• The first cluster of reports of fiery globes falls during the Second Punic War. Livy reports that in 217 BC "at Capena two moons rose in the daytime ... and at Capua a kind of moon fell during a rainstorm."[16] The Capuan "moon" may have been a manifestation of ball lightning, but the "two moons" at Capena most likely were not. Mock moons are seen only at night when the real moon is very bright, but a bolide seen together with the real moon in the daytime, or a bolide split in two, is a possibility.

[13] For modern bolides, see Nininger (1952).

[14] Obsequens 69; D.C. 47.2.3; possibly also Verg. *Aen.* 8.527–9.

[15] J. *BJ* 6.5.3 (translation by H. Thackeray); Tac. *Hist.* 5.13.2. Silverman (1998) discountenances a rare daytime aurora, which would be quite faint. Compare the military imagery with that in 2 Kings 2:11; Zechariah 6:1–8; Verg. *Aen.* 8.528–9. Other ancient reports of celestial armies seem too vague, illusionary or likely apocryphal to merit discussion: Jason of Cyrene in 2 Maccabees 5:1–4 (cf. 2:21); App. *Mith.* 12.27; Obsequens 56; D.C. 51.17.4; 56.24.3–4; Hdn. 8.3.8–9; Nazarius 10.14.

[16] Liv. 22.1.10–12; Orosius 4.15. Three moons appeared simultaneously in 223 BC and in 122 BC, and probably consisted of two mock moons on either side of the real moon, although the time is not explicitly stated to have been night: Plin. *Nat.* 2.99; Plu. *Marc.* 4.1; Orosius 4.13; Obsequens 32; Apuleius in Lyd. *Ost.* 4; Zonaras 8.20.

• Seneca (*Nat.* 1.1.2; 7.15.1) gives two examples from the eastern Mediterranean. In 168 BC, when L. Aemilius Paullus was waging war against King Perseus of Macedon, "a ball ... was the form of a fire that appeared, as large as the moon." This could have been a bolide.

• A more complicated object made its appearance sometime between 151 and 146 BC:

> After the death of King Demetrius of Syria, ... a little before the Achaean War, a comet blazed out, not inferior to the sun. At first it was a fiery red disk,[17] emitting a light so bright that it dissipated the night. Then, little by little, its size dwindled and its brightness faded; at last the light died completely.

Since the object was seen for more than a moment (as indicated by its designation as a *cometes*), it was probably not ball lightning or a bolide; it also seems to have been too bright to have been the former, and too stationary to have been the latter. Nor could it have been an instance of "night sun" (*sol noctu*), defined by Pliny as creating diffuse light in the nighttime sky and interpreted today as an aurora.[18]

• Two parallel records of 91 BC preserved by Livy's extractors Orosius and Obsequens refer to central Italy.[19] Over the city of Rome "about sunrise a ball of fire shone forth from the northern region with a loud noise in the sky." The sonic boom indicates that this was probably a bolide, rather than ball lightning as Bicknell suggested.

• The same year, a much stranger object was noticed near Spoletium:

> Furthermore, several Romans on a journey saw a gold-colored ball roll down from the sky to the earth; after growing larger, it was seen to rise upward again from the earth toward the rising sun and to block the sun itself by its size.

Bicknell proposed that this was ball lightning. But outside of high-altitude storm clouds, ball lightning averages only 23 cm. in diameter, and the description suggests something much larger than this. Although the reported vertical motion, drawn-out duration and prevailing sunny weather are not unheard-of in ball lightning observations, the combination of improbable characteristics makes this explanation unattractive. The object's apparent trajectory appears more consistent with the approach, overhead passage and retreat of a bolide. On the other hand, an actual landing on or near the ground is strongly indicated.

[17] Contrary to Ramsey (2006) 79–81, the color indicates that it was not a genuine, white comet; see also Sen. *Nat.* 1.15.2.

[18] Plin. *Nat.* 2.100; Stothers (1979a) 94–5.

[19] Orosius 5.18; Obsequens 54. See also Bicknell (1971) 13–16 and (1975) 286–8. Ball lightning is described by Smirnov (1993).

• Pliny (*Nat.* 2.100) also reports an incident that at first glance looks like the preceding one, but occurred at night:

A spark was seen to fall from a star and to grow as it approached the earth; after it had become as large as the moon, light was diffused all around as if on a cloudy day; then, retreating to the sky, the object changed into a torch. This is recorded to have occurred only once: Silanus the proconsul with his retinue saw it, in the consulship of Gnaeus Octavius and Gaius Scribonius.

M. Junius Silanus was governor of the province of Asia in 76 BC, and the incident probably took place there. Silanus' testimony receives indirect support from an allusion by Lydus (*Ost.* 6) to several later occurrences of the same phenomenon, although without reference to a torch. The size, brightness and transience of the object at its maximum seem to rule out a comet or a new star (nova), interpretations suggested by Barrett and Hertzog, respectively. But Bicknell's proposal of ball lightning also founders on the object's change into a torch. Wittmann has postulated a complex UFO encounter, but this explanation seems unnecessary. Since no landing of the object was reported, it is simplest and most natural to interpret the event as the overhead passage of a bolide leaving a luminous train.[20]

• It is not until four centuries later that the next report in this category is found:

At Antioch, in the daytime, a star was seen toward the eastern part of the sky, emitting smoke copiously as if from a furnace, from the third hour to the fifth hour.[21]

This occurred *ca.* AD 334, and was recorded by a Byzantine annalist, Theophanes Confessor, writing five centuries after the event and using unknown sources. The one-day, two-hour duration of the phenomenon is much too short for a comet, despite the suggestions of Barrett, Mango and Scott, and Ramsey, while the smoking trail of a bolide would have appeared most unstarlike, being elongated, irregular, and gradually dissipative.[22]

[20] Wittmann (1968) 225; Bicknell (1971) 14–15 and (1987) 163–4; Barrett (1978) 93–4; Hertzog (1986) 114–15; Huang (1987) 216; Stothers (1987) 211–13.

[21] Theophanes Confessor AM 5826; Barrett (1978) 103; Mango and Scott (1997) 49–50; Ramsey (2006) 173–5. Cf. Revelation 9:1–2. This *astēr* may be the same object as the comet mentioned by Eutropius 10.8 and Aurelius Victor 41 as having appeared before the death of Constantine.

[22] Two other dated reports of mysterious fiery globes are not sufficiently reliable to be worth discussing here: one in 323 BC, Ps.-Callisth. 3.33 (cf. Julius Valerius 3.90); and the other in AD 363, *Epitome De Caesaribus* 43 (cf. Amm. Marc. 25.2.4–8). A fiery pillar appeared near Athens in 404 BC on a moonless, stormy night and was possibly a

B. Close Encounters of the First Kind

Hynek defined a Close Encounter of the First Kind as an observation at close range of a UFO that fails to interact with the observer and does not leave a physical trace. By this definition, the "fiery red disk" of *ca.* 150 BC and the "gold-colored ball" of 91 BC might be considered borderline examples.

• A more characteristic example occurred in 74 BC, when a Roman army under L. Licinius Lucullus was about to engage the forces of King Mithridates VI of Pontus. According to Plutarch:

> But presently, ... with no apparent change of weather, but all on a sudden, the sky burst asunder, and a huge, flame-like body was seen to fall between the two armies. In shape, it was most like a wine-jar (*pithōi*), and in color, like molten silver. Both sides were astonished at the sight, and separated. This marvel, as they say, occurred in Phrygia, at a place called Otryae.[23]

The presence of thousands of witnesses, including Lucullus and Mithridates, vouches for the incident's occurrence. The term *pithos* was routinely applied by ancient meteorologists to any large barrel-shaped, smoky celestial fire, according to Posidonius.[24] Could the object of 74 BC have been a meteorite? The bright silvery color might describe the incandescence of the object while falling, but freshly fallen meteorites are black, and Plutarch makes no mention of any noise, let alone an impact. The object must have measured much more than a meter across, since it was easily resolved at a distance greater than half the range of a bowshot. If it had remained on the ground, a meteorite of such size would doubtless have become a cult object in Phrygia, with its long tradition of meteorite worship,[25] yet later historical records referring to Phrygian meteorites are silent about it. In modern experience, an episode like this would easily fall under the rubric of a classic UFO encounter. But we cannot rule out the fall of a bolide.

• A fourth incident is known from a biography of St. Anthony, probably written by Athanasius, bishop of Alexandria, following a personal interview with the witness years afterward. The date was *ca.* AD 285, in or near the Fayûm in the Egyptian desert. Anthony saw

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luminescent tornado: Clem. Al. *Strom.* 1.24 (cf. Exodus 13:21–2; 14:24). Other dated fiery pillars and beams were probably auroral displays: Stothers (1979a).

[23] Plu. *Luc.* 8.5–7 (trans. by B. Perrin).

[24] [Arist.] *Mu.* 395^{b}12; Man. 1.842–3; Sen. *Nat.* 1.14.1; 1.15.2–4; Plin. *Nat.* 2.90; Ptol. *Tetr.* 2.9; Alex. Aphr. *in Mete. ad* 344^{a}5; Origenes *Cels.* 1.58; Arrianus Meteorologicus in Stob. 1.28.2; Phlp. *in Mete. ad* 344^{a}16; Apuleius in Lyd. *Ost.* 10a; *Mens.* 3.41; 4.71.

[25] Cults were associated with several reputed falls of stones in this part of the world, including Troy, Pessinus, Cyzicus, Abydus, Ephesus and Aegospotami.

on the desert floor a large silver disk that suddenly vanished like smoke.[26] Although the encounter is introduced into the biography in a straightforward, factual way, the biography is noted for its religious visions, and even if authentic, the apparition may have been a desert mirage.

C. Close Encounters of the Second Kind

In Hynek's system, a Close Encounter of the Second Kind leaves a physical trace. Ancient literature contains no record of a UFO-like object pressing an imprint into the ground or depositing a material residue. On the other hand, rains of strange material were occasionally reported, and since analogous reports in modern UFO research are accepted when sufficiently well-documented and verified, ancient examples are cited here in the absence of more direct evidence. In modern reports, a whitish gossamer substance dubbed "angel hair" is said on rare occasions to have dropped from a UFO and sometimes to have vanished quickly on contact with the ground. In other reports, glassy fibers are left by a UFO after takeoff from the ground, or a chalky substance remains.[27]

• An ancient sample of "angel hair" was perhaps picked up at Rome in AD 196 by the historian Cassius Dio, who writes:

> A fine rain resembling silver descended from a clear sky upon the Forum of Augustus. I did not, it is true, see it as it was falling, but noticed it after it had fallen, and by means of it I plated some bronze coins with silver; they retained the same appearance for three days, but by the fourth day all the substance rubbed on them had disappeared.[28]

Other falls in which a solid whitish substance was involved include two "rains of chalk," one at Cales in 214 BC and another at Rome in 98 BC. No other information is offered about the physical nature of this chalk.[29]

[26] [Athanasius] *Vita Antonii* 11. Mirages were a familiar phenomenon to those living in the North African deserts: D.S. 3.50.4–51.5; Tert. *Adversus Marcionem* 3.24. A desert-dweller like Anthony would certainly have been aware of such an effect.

[27] See the books by the Vallees (1965), (1966) and (1990).

[28] D.C. 75.4.7. The "rain of silver" during Aurelian's reign (AD 270–5), mentioned by Georgius Monachus 3.168, probably alluded to that emperor's reform of the imperial silver coinage, although later annalists interpreted the rain literally.

[29] Liv. 24.10.7; Obsequens 47; August. *C.D.* 3.31. Rains of "wool" were also reported: Liv. 42.2.4; Plin. *Nat.* 2.147; Obsequens 12, 52; Orosius 7.32; Jerome *Chronica* AA 2383; Lyd. *Ost.* 6.

D. Close Encounters of the Third Kind

A Close Encounter of the Third Kind involves a UFO seen in association with an occupant, usually described as human or humanoid.

• According to Livy, in 214 BC "at Hadria an altar was seen in the sky; around it were forms of men dressed in shining white." The nature of the altar (*ara*) is not specified. But four years earlier, "in the district of Amiternum, in many places, forms of men dressed in shining white were seen at a distance; they did not approach anyone."[30] Except for this report, entities unassociated with a UFO will not be a subject of investigation here, as problems of identification and verification present insurmountable obstacles even in modern cases, as Hynek and others have shown. The incident of 214 BC nonetheless strikingly recalls the classic observation of UFO occupants on a hovering, overhead craft seen by Father Gill and his companions in 1959 off Papua New Guinea.[31]

• The last encounter is again from the early Christian hagiographical literature and took place near the Via Campana between Rome and Capua *ca.* AD 150. On a sunny day, a "beast" like a piece of pottery (*ceramos*) about 100 feet in size, multicolored on top and shooting out fiery rays, landed in a dust cloud, accompanied by a "maiden" clad in white.[32] There was only one witness to the event, probably Hermas the brother of Pope Pius I.

Conclusions

This collection of what might be termed ancient UFO reports has been culled from a much larger number of reports of aerial objects, most of whose identifications with known phenomena are either certain or at least highly probable. Embedded in the mass of relatively explicable ancient reports, however, is a small set of unexplained (or at least not wholly explained) reports from presumably credible witnesses. If these reports are examined statistically, essential features of what I will, for argument's sake, call the ancient UFO phenomenon can be extracted:

• *shape*—discoidal or spheroidal;
• *color*—silvery, golden or red;
• *texture*—metallic or, occasionally, glowing or cloudy;

[30] Liv. 21.62.5; 24.10.10. See also n. 10, above.
[31] Vallee (1965) 145–8; Hynek (1972) 167–72; Herbison-Evans (1977).
[32] [Hermas] *Shepherd of Hermas*, Vision 4.1–3. Cf. Exodus 3:2–6; Job 41:19–21; Jeremiah 1:13; Ezekiel 1:1–28; 3:12–14; 10:1–22; 11:22–4. Hermas' experience resembles the Miracle of Fatima incident in 1917, which Vallee (1965) 148–51 regarded as a classic occupant case.

- *size*—a meter to well over a meter;
- *sound*—usually none reported;
- *type of motion*—hovering, erratic or smooth flight, with a rapid disappearance.

In at least one instance, the presence of "occupants" covered in shiny white clothing is reported. Encounters range from distant views to possibly actual contact; the preferred place and time of observation seem to be rural areas in the daytime. Physical evidence is generally lacking.

Greek and Roman scientific thinkers, who were never at a loss for theories, usually regarded these types of aerial phenomena as stars, clouds, atmospheric fires, light reflections or moving material bodies.[33] Since most of the original theories hark back to Aristotle and his predecessors, with none being later than Posidonius, they generally predate the reports collected here, none of which is earlier than 218 BC. It is accordingly impossible to know whether the later observers (mostly practical Romans) interpreted the phenomena literally as they described them or were simply using the best descriptive language they were capable of, while holding back on theoretical speculation.[34] But any viable theory must reckon with the extraordinary persistence and consistency of the phenomena discussed here over many centuries. Whether one prefers to think in terms of universal recurrent visions from the collective unconscious, misperceptions of ordinary objects, unusual atmospheric effects, unknown physical phenomena or extraterrestrial visitations, what we today would call UFOs possess an intrinsic interest that has transcended the passage of time and the increase of human knowledge.

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[33] Arist. *Mete.* 339^{a}33–45^{a}10; 370^{b}3–78^{b}6; Sen. *Nat.* 1, 7; Aëtius 3.2.

[34] At least before the 1st century BC, Greek scientific theory would not have been familiar to many Romans, and so the lack of explicit interpretation in these simple reports should not be deemed surprising.

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