

*Ron Westrum*

## Sasquatch and Scientists: Reporting Scientific Anomalies

This article explores the dilemma which confronts the observer of an apparent scientific anomaly: should he report the phenomenon and face possible ridicule or should he refrain from reporting and so question the reliability of his own mind or senses? The author examines how the response of the public and the media to observations or obvious hoaxes which resemble the observer's experience may either inhibit or encourage reporting. He concludes by drawing a parallel between public and scientific attitudes toward Sasquatch and U.F.O. phenomena and the reluctance of established science and popular wisdom in late eighteenth-century France to accept the celestial origin of meteorites until confronted by an undeniable, widely witnessed sighting.

In pondering the meaning of Sasquatch reports and trying to determine the reality of the creatures they describe, we must consider the manner in which these reports reach us. In a series of papers<sup>1</sup> I have presented data about the "social intelligence system" which transmits reports of anomaly experiences from those who have the experiences to the rest of society. What I would like to do here is to suggest some of the implications of this work for the reporting of Sasquatch sightings. Unfortunately, I have not been able to do a special study of Sasquatch reporting, although I have read much of the literature. Hence, my remarks are necessarily somewhat impressionistic. I hope, nonetheless, that they will help clarify some of the issues involved in considerations of the reality of Sasquatch.

### THE DEFINITION OF "ANOMALY"

"Anomaly" is used here in a very special sense to describe events that are "impossible" in the cultural framework of the person who experiences them. An anomaly is an event that is not supposed to happen. Accordingly, the person who experiences such an event is likely to see it as problematical. He may actually have difficulty recognizing its anomalous character in the

first place. Even when he does recognize it as an anomaly, he may try to check his own perceptions in various ways.

The event can fall into one of three categories. It may be a rare event which is known to science, an event which is unknown to science but conforms to current scientific theory, or an event which is unknown to science and which does not conform to current scientific theory. Events of the first type are to be considered anomalies only because the witness does not believe they are scientifically acceptable; however, the phenomenology of these sightings should be the same as the other two types, and therefore they can serve as a useful control group. Some examples of the first type would be meteorite<sup>2</sup> and ball lightning<sup>3</sup> sightings by persons who did not realize that these events are known to science.

Anomalies of the second type might include Sasquatch, sea-serpents, and in fact the whole area that Bernard Heuvelmans has referred to as "cryptozoology."<sup>4</sup> While it is conceivable that there could be other "cryptosciences," as Marcello Truzzi<sup>5</sup> has called them, most anomaly reports which involve unknown but scientifically acceptable events are biological in nature. Sea-serpents, for instance, are in no sense biologically impossible. Indeed, quite formidable sea-serpents, such as mosasaurs, have existed at earlier points in the Earth's history. On the other hand, non-biological anomalies usually involve the violation of one tenet or another of scientific theory. Truzzi has referred to claims of the third type as "parascientific," since they go beyond current scientific theory. Telepathy would clearly be parascientific, and U.F.O.'s might be. Some physicists would consider ball lightning parascientific, for there is no adequate theory to explain its occurrence.<sup>6</sup>

All three of these types, however, are likely to evoke similar reactions on the part of a person who confronts such an event. There may be other important contours to the experience as well: the sense of danger, awe, the degree to which the experience violates the percipient's preconceptions, and so forth. But the common thread that ties anomaly experiences together is that they are socially unacceptable, and this means that the person who has such an experience must face a dilemma: should he report the experience or not? Let us explore this problem a little further.

#### THE REPORTING DILEMMA

The person who has had an anomaly experience is likely to experience a certain amount of "cognitive dissonance": a lack of agreement between his beliefs and his experience.<sup>7</sup> The more impressive the experience, the more

difficult this problem is likely to be. Many witnesses will resolve the problem in their own minds by denying the experience or rationalizing it away or by changing their beliefs about the event in question. It is likely, however, that they will consult others about the meaning of the experience, either for advice or to convince them of its reality. Usually these will be the person's family, friends, or work associates; how these persons react may determine whether any formal attempt at reporting is made. Often, we know, the person's family or friends will not believe him, especially if he was the sole witness.<sup>8</sup> But in any case the witness is often left with the same problem: was the experience real? If it was, then what was the nature of the event experienced?

To get this resolution, however, the person is likely to have to make a public report. Generally, the person's primary group will not have the necessary information, so he must go to the authorities or to scientific "experts." Or, he may report what he has seen to the press, in an effort to convince others of its reality (although more often the press will approach the sighter). But by making a report the person exposes himself to ridicule. This may come in the form of condescension or laughter on the part of the person or persons to whom the report is made, or it may come in the much more damaging form of satire in the press. Captain George Drevar, from whose ship, the *Pauline*, a sea-serpent was sighted in 1875, complained that:

It is easy for such a paper to make any man, good, great, or interesting, look ridiculous. Little wonder is it that my relatives write saying that they would have seen a hundred sea-serpents and never reported it; and a lady also wrote that she pities anyone related to anyone that had seen the sea-serpent.<sup>9</sup>

Reporting may also be inspired by a sense of civic duty. In the case of U.F.O. reporters, for instance, this is claimed to be the major motivation in forty-three per cent of the cases.<sup>10</sup> From the manner in which the report is often treated, however, one might well infer that the person's civic duty is to keep quiet. Certainly, one of the main reasons that eighty-seven per cent of U.F.O. sighters never tell anyone other than family or friends about their sighting is the fear of this kind of treatment.<sup>11</sup> And furthermore, how can the person be sure that what he saw was really something anomalous and not something normal that "just looked funny"? The concern about being unable to discriminate the anomalous from the normal was found to be the major reason for non-reporting in U.F.O. cases.<sup>12</sup> One thing is certain: the reporter is very unlikely to be rewarded for making the report, except in

the achievement of notoriety. Hence, the person who has an anomaly sighting is rewarded for keeping quiet and acting as a buffer for the rest of society from reports of anomalous events. Unfortunately, this may mean that the sighter is unable to "square" his experience; he does not know whether he saw a genuine anomaly, an optical illusion, an hallucination, or simply a rare phenomenon.

On the other hand, persons who see the Loch Ness monster, a U.F.O., or a Sasquatch are lucky: the anomalies they have experienced are well known, they are labeled, and even though the person who sees one has had a deviant experience, at least it is a deviant experience which others have had. I have often wondered about persons, on the other hand, who have anomaly experiences which they, at least, believe to be unique. In one case, for instance, after I had given a talk on U.F.O.'s to a small group, a person brought forward an experience that he had related to very few persons: he had seen a luminous globe roll into and out of a room. Many readers will recognize this immediately as an instance of ball lightning, but the person who had had the sighting had felt very uncomfortable about it, since he did not know he had experienced a recognized (if somewhat controversial) natural phenomenon.

The appearance of reports of anomalies in the press which are similar to the anomaly one has experienced are thus reassuring; they help convince one of the reality and validity of one's own experience. I was pleased one day to get a call from a woman whose distress I had indirectly alleviated by talking about U.F.O.'s. The woman, who was a cook at a nearby airport, had had the misfortune of having a U.F.O. experience on the Fourth of July. For this she had received a merciless ribbing from her friends. When an article about my U.F.O. research appeared in the press, her friends began to feel that perhaps she was not so crazy after all. Finding out that other persons are having the same experience can thus be very important for one's sense of self-esteem and for the esteem of one's friends.

The reports of others are also likely to make a witness more willing to report. In what I have called the "report release phenomenon,"<sup>13</sup> old sightings are often reported after considerable publicity is given to a phenomenon in magazines or the press. Some believe that the "me too" character of this stimulated reporting is evidence of its fraudulence,<sup>14</sup> but I am certain that in some cases, as with the ball lightning sighting mentioned earlier, there is a sense of relief in being able to make one's experience public. There is also, I suspect, a feeling that reporting the experience is worthwhile, that someone is interested in it who can evaluate it properly. In fact, the recipient of the released experiences is frequently the author of the article or the expert interviewed by the press.

## FRAUDULENT REPORTS

The appearance of a number of reports in the press is almost certain to awaken another reaction: the desire to demonstrate the gullibility of the public. For this reason and because of the desire for notoriety (particularly on the part of teenagers), a number of hoaxes are likely to be mounted. These take essentially three forms: false witness that an anomaly has been observed; fabricated evidence (such as photographs or physical traces); and the construction of stimuli which will make others believe that they are witnessing an anomalous event. For instance, in regard to Sasquatch reports, we find persons making up stories that they have seen "Bigfoot," making false tracks, and occasionally running around in costumes that will fool a casual observer. Doubtless a study of the persons who thus fabricate anomalous events would be interesting from a variety of perspectives. However, since we do not have such a study, we can only examine the consequences of such hoaxing.

In the first place, it is evident that many hoaxes are likely to be exposed. Some, in fact, are revealed by their perpetrators, since this is an integral part of their demonstration of the gullibility of the public. In other cases the internal evidence of the case contains a subtle contradiction which, when revealed, displays the humorous nature of the report. One way or another a good many, perhaps the majority, of fraudulent cases are exposed. The effect of this exposure on the way in which the public and the scientific community regard reports of anomalous events is almost necessarily negative. Anomalous reports by their very nature are difficult to believe in any case. The existence of fraudulent reports seems to suggest a ready explanation that is appealing to scientists, newspaper reporters, and professional skeptics: all anomalous reports are frauds.

The effect on reporting is correspondingly negative. Few people enjoy being laughed at. The person who is willing to report an anomaly when several fraudulent reports have recently been exposed is hardy indeed. Many persons who would be willing to make a detailed report if they could find someone sympathetic to report to are discouraged by initial negative receptions created by this atmosphere. The fraudulent report is thus likely to constrict the reporting process.

## PERCEPTUAL CONTAGION

Another source of difficulty is the low-threshold anomaly experience. I use the term "low-threshold" to refer to those anomaly experiences in which

there is a mental set in favour of perceiving the anomaly. With a low threshold of perception, perceptual mistakes are easily made, and it is all too easy to have a Sasquatch "sighting" which will not hold up under analysis.<sup>15</sup> I have personally interviewed persons who have had low-threshold sightings of U.F.O.'s; in these cases the effect of suggestion and preconception on their experiences is obvious to the experienced interviewer.

The difficulty with such sightings is the spread of folklore which describes the parameters of the Sasquatch experience. The person learns, in advance of the experience itself, what kinds of perceptual cues can be used to identify a Sasquatch. He may then require, from a perceptual standpoint, an absolute minimum of stimuli to feel that he has had a Sasquatch experience. But folklore about anomalies follows directly on the heels of publicity. In addition to information contained in newspaper articles, there are more sensational stories in *True*, *Argosy*, *Saga*, and similar magazines. This is further supplemented by "documentary" or dramatized film accounts of real occurrences and by orally transmitted folklore. The latter tends to stress particularly methods of detection and protection against dangers associated with Sasquatch sightings. It is improvised news<sup>16</sup> to fill the specific need of dealing with an uncertain and possibly dangerous situation.

This folklore tends to lower the usefulness of the average sighting, since it makes people more willing to perceive something when nothing is there and incidentally makes them more vulnerable to hoaxes of the second and third kinds. It does a great deal to confuse the question of the anomaly's existence.

#### REACTIONS OF THE MEDIA

Until a sighter has actually tried to make a report, his perception of the reaction that a report will produce is determined in a large part by what he reads and sees in the media. As we have seen, if news stories present other reporters as fools, he may be very reluctant to report. If the story is presented in a neutral or sympathetic fashion, on the other hand, this may encourage the person to report the sighting. The media controls, to a larger extent than it realizes, the number of reports made public. The mere fact of publicizing anomaly sightings at all, in fact, is likely to stimulate reporting, since it demonstrates to sighters that other persons are having the same experiences.

The presentation in the media of opinions by scientific experts plays a lesser, but still important, role. Scientists can usually be counted upon to reject anomaly reports, but this reaction is recognized and discounted by

many people. (The situation is quite different when direct contact with a scientist is involved.) The more important effect of scientific opinion concerns the reaction of the press: the reporter looks to the opinions of the scientific community as a guide for his own treatment of reports of anomalies. Press interviews with scientists are as much for the benefit of the press as they are for the information of media consumers.

Whether or not there is an anomaly sighting "wave," I would like to suggest, is determined by the press in the same way that it determines "crime waves." In fact, the press perhaps plays an even larger role in anomaly reporting, since it can affect the reporting of anomalies to the authorities in the first place, whereas in crime reporting the control of the press is essentially limited to publicizing events that have already been reported to the police. The press are often viewed as stimulating anomaly reports because of the large demand for them on the part of their readers. My strong suspicion is, however, that it is the opinion of their own colleagues that is the major determinant of press behaviour. If other newspapers are printing anomaly reports, then they will too. What is "news," then, is as much determined by the behaviour of the other newspapers as it is by consumer demand. What this means is that the sudden appearance of many publicized reports of Sasquatch or other anomalies may not be a result of a sudden spate of sightings but rather of the imitative behaviour of the press. At the very least we can note that without a massive publication of reports the "wave" will not even exist. I think it is very naive to assume, however, that press coverage of anomaly sightings is only affected by the rate at which sightings are reported. There are also the internal determinants of press behaviour that I have indicated.

#### SASQUATCH AND SCIENTISTS

In contemporary society we have given to scientists an important task which in previous times was frequently given to the clergy: the management of our "sense of reality." It is science that decides what is real and what is not, what exists and what does not exist. To be sure, other institutions compete with science for this right, but ultimately science is the arbiter. When the reality of creatures like the Sasquatch is put to the question, science has the final say. Even Sasquatch advocates who have nothing good to say about science would be delighted if science would admit these hypothetical creatures to the realm of legitimately researchable objects. Perhaps, therefore, we ought to consider for a minute just how science might go about making such an admission. To do so I am going to call to my aid a little bit

of history and discuss the meteorite controversy of the late eighteenth century.<sup>17</sup>

At that time it was fashionable for savants to poke fun at the “absurd” belief that stones could fall from the air. After such a fall of stones at Julliac in France was witnessed by three hundred persons in 1790 and attested in a legal affidavit, the witnesses were ridiculed in the scientific press. An “obviously wrong fact . . . a phenomenon *physically* impossible,” said one editor who felt nothing but pity for the witnesses. However, by 1803 the scientific men of the time had done a complete turnabout and decided that the falling stones were real after all. What had happened? If we can understand how this change took place, perhaps we can make an educated guess at what would change scientists’ minds about Sasquatch. I can determine three elements which were involved.

The first element was the discovery that the stones alleged to be aerolites were similar in composition to each other and different in composition from terrestrial rocks. This was not so much a matter of what was in them, but rather how it was put together. For instance, the meteorites with a considerable amount of iron had nickel in them, a combination which had not been found in terrestrial rocks. Similarly, all the stone meteorites had black crusts and a granular interior: if they did not have a common origin, why did they look so similar? However, these common elements were discovered only through research: some scientists had to take the meteorites seriously enough to detect these similarities.

The second element was a theory about where the rocks came from. Scientists were more willing to consider reports of falling rocks when some of their number proposed that meteorites might be thrown out from volcanoes on the moon. Now it turned out that this theory was erroneous, but the important thing was that *there was a theory*. Established science maintained that unless there was a theory to explain the origin of the meteorites, they could not be considered as a special phenomenon. Of course, we have all been taught in school that theories are proved by experiment, not the other way around, but actually, in this case, it was the existence of the theory which helped the experiment (perhaps we should say the experience) to gain acceptance.

The third element was a sighting which could not be ignored. Exactly why this sighting, which took place near a French village called L’Aigle in 1803, could not be ignored is a complex matter. Partly, it was because the question of meteorites was very controversial at the time, even to the point of becoming the subject of popular songs. Partly, it was because the village was only about seventy miles from Paris, whereas Julliac was in the South of France. And, finally, one of the witnesses to the event was a member of the French



*Institut*. Also, approximately three thousand stones had fallen. It was not an easy sighting to ignore.

If we consider the Sasquatch, it is evident that not all of these conditions are fulfilled. For instance, while the overall biological characteristics of the Sasquatch are well known to those who have studied the reports, there is no theory linking the occurrence of such large hominid creatures with the rest of evolutionary theory, at least not to my knowledge. Then, there is the problem of why, if they do exist, we do not have a carcass. The third element, the sighting which cannot be ignored, is also clearly not present, no matter how credible the Patterson film may be to Sasquatch advocates.

The meteorite phenomenon passed through three stages: a stage of uncorrelated observations, a stage of intense controversy, and finally the stage of scientific acceptance. Thanks to the efforts of Ivan Sanderson, John Green, and others, Sasquatch reports are no longer uncorrelated observations. They have passed to the stage of controversy. When they will finally reach scientific acceptance depends in part upon the intellectual inventiveness of Sasquatch advocates in devising a theory. But it also depends on an observation which cannot be ignored; in other words, it also depends upon a lucky break.

## Notes

1. "Social Intelligence About Anomalies: The Case of Meteorites," *Social Studies of Science* 8 (1978): 461-93; "Social Intelligence About Anomalies: the Case of UFO's," *Social Studies of Science* 7, no. 3 (1977): 271-302; "Knowledge About Sea-Serpents," *Sociological Review Monographs* 27, "On the Margins of Science" (1979), edited by Roy Wallis, pp. 293-314.
2. See H. H. Nininger, *Find A Falling Star* (New York: Paul Eriksson, 1972), p. 30.
3. Stanley Singer, *The Nature of Ball Lightning* (New York: Plenum Press, 1971).
4. See for instance, Bernard Heuvelmans' *On the Track of Unknown Animals* (New York: Hill and Wang, 1959).
5. "Editorial," *Zetetic* 1, no. 2 (1977): p. 3-8.
6. See Eugene Garfield, "When Citation Analysis Strikes Ball Lightning," *Current Contents* 8, no. 20 (1976): 5-16.
7. Leon Festinger, *A Theory of Cognitive Dissonance* (Stanford: Stanford University Press, 1957).
8. See John Fuller, *Incident at Exeter* (New York: G. P. Putnam's Sons, 1966), pp. 13, 54, 140, 176.

9. Quoted in Bernard Heuvelmans, *In the Wake of the Sea-Serpents* (New York: Hill and Wang, 1968), p. 225.
10. Aldora Lee, "Public Attitudes toward UFO Phenomena," in University of Colorado, *Scientific Study of Unidentified Flying Objects* (New York: Bantam Books, 1968), p. 227.
11. *Ibid.*, p. 226.
12. *Ibid.*
13. See Westrum, "Social Intelligence About Anomalies: The Case of UFO's," p. 285.
14. Urner Liddel, "Phantasmagoria or Unusual Observations in the Atmosphere," *Journal of the Optical Society of America* 43 no. 4 (1953): 314-17; also Herbert Hackett, "The Flying Saucer: A Manufactured Concept," *Sociology and Social Research*, 32 (May-June 1948): 869-73.
15. For a discussion of "low-threshold" sightings and their characteristics, see my article on "Witnesses of UFO's and Other Anomalies," in Richard Haines, editor, *UFO's and the Behavioral Scientist* (Metuchen, N.J.: Shoestring Press, 1979).
16. Tamotsu Shibutani, *Improvised News: A Sociological Study of Rumor* (Indianapolis: Bobbs-Merrill, 1966).
17. For further details, see my "Science and Social Intelligence about Anomalies: The Case of Meteorites," *Social Studies of Science* 8, no. 4 (November 1978).