

Problems Reporting Anomalous Observations in Anthropology¹

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Abstract—The scientific method has provided the world with an enormous fund of knowledge. When scientific techniques of observation, experimentation, and analysis were formulated, they were new ways of considering phenomena, such as sunshine, magnetism, gravity, and many other puzzles. After centuries of using scientific methods, however, the fund of knowledge has led to an erosion of the “discovery” attitude of early scientists. Practitioners now base most of their ideas on received knowledge and often simply accept as true what “science knows”. Unfortunately, not all of the assumptions based on these “truths” or even the “truths” themselves are correct. Yet many scientists have reached a point where they now seem to believe that if a phenomenon cannot be explained, or does not fit easily into existing theory, it does not exist. This attitude is similar to the beliefs of Europeans in the centuries before Columbus who looked to Aristotle or the Bible as the source of all “truth” and killed or exiled those who questioned. In this article, I examine the consequences of some of the modern assumptions. One assumption is that people never arrived in the Americas prior to about 11,000 years ago. The other is the assumption that there is something called the “supernatural” that must be understood by “secular” explanations.

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Anomalies are always troublesome in a discipline. They do not fit. Investigations of them more often than not prove fruitful, however, resulting in new discoveries that increase our understanding of the world. But all too often funding sources reject applications to investigate anomalies, and hypotheses suggested to explain them frequently are dismissed without a hearing. Sometimes the rejections themselves result from erroneous assumptions or concepts developed in the past. One such assumption that this article looks at is the concept of the supernatural.

The scientific method has provided the world with an enormous fund of knowledge. It is legitimate to say the method has transformed life on this planet. When scientific techniques were first formulated, they were new ways of considering the world and phenomena that people worried or puzzled over. After centuries of using the scientific method, however, the fund of knowledge that has accumulated has led to an erosion of the “discovery” attitude of

early scientists. Many practitioners now in the field base their ideas on received knowledge—largely because of the amount of information they have to learn before they can move into new areas of discovery. Consequently, people simply accept as true what previous scientists have said. Unfortunately, as we have begun to learn, not all of the assumptions or scientific “truths” are, in fact, correct. Yet scientists have reached a point where many of them now think that if a phenomenon cannot be explained, or if it does not easily fit into existing theory, it does not exist. A modern example is the case of the hole in the ozone. For about five years, scientists working with Antarctic data kept recalibrating their machines because “everyone knows there cannot be a hole in the ozone”. That misconception took only five years to change. It took a lot longer to convince geologists that continents did, in fact, move.

Skepticism is an important part of science. Nothing should be accepted without evidence, but scientists are more rigid about this now than they were when the scientific method was being formed. What is accepted as evidence has changed. In the early centuries of the first millennium, if someone said they saw certain things happen, that was evidence, especially if the speaker was an important person. Canals on Mars, spontaneous generation of life in dunghills, visions of saints, and a variety of miracles were generally accepted even in the face of some skepticism. As technological advances produced instruments that extended human capabilities, however, people viewed personal observation as less trustworthy. Specialists began to believe that more and more data were essential before they would accept a personal observation as valid. Armstrong (2000:3) dates a major change in attitude beginning in 1492. Even for a considerable time after that date, however, alchemists were considered scientists, science included astrology as well as astronomy, and Aristotle had spelled out the truth of virtually everything, at least for people in Europe. This caused serious problems for people who knew Aristotle was wrong in some things (men do not have more teeth than women, nor is the back of the cranium empty space [Boulting, 1958:17]). The sixteenth and seventeenth centuries saw the continuing development of the scientific method, which insisted on experimentation and “proof” through experimentation as the only path to truth (Smith, 2001:12). This was the period when the concept of the category “supernatural” began to develop into something that many people regarded as the opposite of science. The split between the categories people thought of as science and religion or the supernatural grew bitter as science began to explain more and more phenomena that had previously been left to God (or gods). When the Roman Catholic Church accepted Aristotle’s word as the only acceptable scientific truth, anyone who tried to provide evidence that contradicted his words did so at the risk of torture and death. Giordano Bruno, who believed that the universe was infinite and that God was immanent in all of it, was burned at the stake in 1600 (Boulting, 1958:304; West, 2001:245). It is no wonder that the reaction of scientists toward anything suggestive of the supernatural has often been almost as extreme.

Labels are important. The heritage of the past lives on. Today, whatever is labeled as occult, sacred, supernatural, or divine is obviously NOT SCIENCE, and for many scientists, certainly DOES NOT EXIST. A more moderate approach was taken in a summer seminar on neo-Darwinism at Cornell University that I attended. One of the biology instructors said that science simply is not equipped to deal with the study of God (speaking of the Christian God). He emphasized scientific reliance on experimentation and pointed out how crucial it was to be able to exclude the variable under study from one part of the experiment and include it in another. "Say you have two test tubes," he said. "If God exists, how do you keep Him out of one of them? If God does not exist, how do you get Him into either?" Because science has no way to exclude or include God systematically from its experiments, science has no way to prove or disprove the existence of that deity. The answer for science in the most recent century, therefore, has been to ignore the existence of God. Scientists and philosophers in past centuries, however, often made serious attempts to prove that existence. When they failed to convince skeptics, the attempts gradually ceased. The assumption that seems to have prevailed among many scientists seems to be that because there is no way to prove God's existence, it is wiser to assume that God does not exist. There is no hole in the ozone, continents don't move, the methodology is poor, the equipment has failed, the scientist is deluded or is a fraud.

One delightful report—from the field of medicine—illustrates the degree of denial. According to the sociology colleague who recounted it to me, it was a study done in England of the effect of faith healing on the common cold. After a rigorous test where attempts were made to deliberately infect subjects, the scientists reported that when an individual had "the illusion of control", the person either did not succumb to the infection or it was less severe and did not last as long. The believers in faith healing had said that believers could escape infection or keep the disease milder and shorter. That was exactly what happened—yet the denial need of the medical investigators was so strong that they called the positive results an "illusion" of control.

This attitude is not an easy one to change, particularly in areas that are complex or that for a variety of reasons elude simplistic explanations. Re-examination of the problem, or accumulation of additional data, has solved many errors and will solve many current mistakes, in time. But when the prevailing opinion of scientists insists that the phenomenon itself does not exist, funding disappears and reputable scientific journals reject articles with theories about "non-existent" phenomena, unless those theories explain the observations away. Consequently, re-examination or accumulation of data and development of theories or hypotheses that could correct misconceptions become more difficult—not to mention the harm done to the careers of people who want to investigate those non-existent phenomena.

There are any number of illustrations of the dampening effect that incorrect assumptions have had on my field of anthropology. When Neanderthal remains

were first discovered, expert explanations for the bones ranged from statements that they came from diseased Europeans to lost Russian soldiers. (Connell, 2001:7–9). The relationship of this form of early humans to modern people is still a matter of controversy, but at least no one but creationists denies either its antiquity or existence any longer.

Another assumption—that humans came late to the Americas—also persists today, and illustrates the importance of powerful authority figures in a field. A Bohemian-born American anthropologist, Ales Hrdlicka, set the entry date for humans into the Americas at about 7,000 years ago. Hrdlicka was certain that humans and extinct animals did not co-exist. Any evidence to the contrary was scornfully dismissed as the result of “poor methodology”. Modern scientific methods finally shook the entry date for humans into the Americas loose from Hrdlicka’s position (after he had died in 1943), but the same argument of “fake” or “poor methodology” turns up regularly when any current anthropologist suggests a date before 12,000 years ago, as Tom Dillahay can testify.

Unfortunately, in their attempt to support existing assumptions, scientists not only ignore evidence, but also occasionally manufacture some. The Pilt-down hoax, based on the assumption then held that human ancestors first got smart and then came out of the trees, is well known. To support this idea, someone (there is still controversy over who it was) ground down ape teeth and stained them, as well as the jaw they were in, and a modern human skull-cap. Whoever perpetrated the hoax arranged for them to be “found” together. This hoax was not finally documented until 1953 (Connell, 2001:17–21). (Before the evidence was presented, however, I had a professor of physical anthropology who refused to accept its validity because he could not see how that jaw could possibly have functioned with that skull. His ideas were presented in the classroom, not for publication, even though he was an eminent physical anthropologist. Flying in the face of accepted “truth” requires a lot of work.)

In another case, statistical data in England were created to support the assumption that certain groups of people were genetically less intelligent than others—supporting the prevailing racial biases of the time. This was in the middle of the twentieth century. People, even scientists, are ever so ready to accept evidence that supports their beliefs, but are oh so slow to accept information that contradicts them. And that is the crux of the problem, of course. It is a reason why cheaters sometimes get away with their fakery for years, and why genuine discoveries are dismissed as fakes, frauds, or the result of poor methodology.

“Poor methodology” is an insulting charge, but an easy one to make and less dangerous than fraud. One has to have a solid reputation to be able to resist career damage caused by a criticism that is tantamount to a charge of incompetence. Current discoveries are putting more and more pressure on the late arrival date for humans in the Americas, however, and much earlier dates

will probably be fully accepted in the near future. Science does change, but sometimes at a glacially slow pace.

Until the changes occur, not only are careers damaged, but good researchers also have a major problem with publication and funding—crucial variables in today's world when researchers are not usually independently wealthy, unlike many scientists of the nineteenth century.

The main problem I want to discuss in this article is even more intransigent than the arrival time of humans in the Americas. Early in my training as an anthropologist, I noticed that discussions of religion (the beliefs and attitudes people have about what the scientific world calls the supernatural) had some serious theoretical and methodological difficulties. In anthropological classes on religion, students often ask if some reported belief "is true". The orthodox answer is that the truth or reality of the belief is not the anthropologist's province; we study what people believe to be true, and observe the consequences of that belief (based on one of the few axioms in anthropology from W. I. Thomas: "If men define situations as real, they are real in their consequences" [quoted in Merton, 1948:193]). This was originally done to avoid the bias of previous generations, which claimed that if people did not believe a particular brand of Christianity, they did not have a religion, but only superstitions, so anthropologists dodged the question of whether any belief was "true" or "correct" by simply describing the beliefs and the behavior as they observed them. This approach had interesting consequences. The assumptions grew that NONE of the beliefs were correct, and that there were no real sacred or supernormal phenomena. This, of course, fitted with and was reinforced by the general scientific assumption that there was no supernatural. Anytime the behavior produced expected results, these results had to be explained secularly. Consequently, anthropologists (and others using anthropological information) turned to psychology, economics, and politics to explain beliefs held by peoples in all parts of the world.

Witchcraft was associated with social tensions. Accusations of witchcraft were explained as ways members controlled or punished the behavior of other members. Because many societies executed an accused witch on little forensic evidence, this was an effective way to remove people who violated social rules, or who made more enemies than friends. Economic advantages were attributed to particular beliefs (the Protestant ethic, for example). Human anxiety led people to use religious explanations for things they feared but did not understand, such as plagues and natural disasters. Three functions of religion are still held to be (1) to support the social norms, (2) to relieve anxiety by providing an illusion of control over natural phenomena, and (3) to explain the inexplicable and give meaning to life. No one ever suggests that perhaps behind the beliefs there might be something beyond current scientific understanding. Any respectable peer-reviewed anthropological journal would normally reject a report for observed phenomena with any explanation that has been labeled occult or supernatural. A few people get around the problem by

simply describing events and the explanations the people give for them, leaving it at that. Another approach is to write in a humorous vein, turning the observations into a joke.

The examples of secular explanations for behavior and beliefs in anthropology are legion. Economic factors are quite popular. Marvin Harris (1978:37) explains that in the Middle East numerous religions taboo raising pigs and eating pork because pigs compete with humans for the scarce resources of shade and water. Yet because pork is so tasty, humans would persist in wasting precious resources by raising and eating pigs unless a powerful belief made people unwilling to risk it. Other people (usually not anthropologists) have suggested that the taboo was stimulated by the prevalence of pig-borne disease (ignoring the many diseases carried by other animals acceptable as food). Similarly, Harris (1978:26) attributes the behavior toward sacred cows in India to their value as donors of fertilizer, fuel, and building materials (houses are plastered with cow dung).

Some anthropologists have used the hypotheses of Freud or other psychologists to explain rituals or taboos. Religion forbidding incest, for example, which removed what Freud saw as attractive sexual choices from consideration, was essential for family unity and to prevent inbreeding, according to this explanation. Studies showing that siblings were actually not the most sexually desirable marriage choices were ignored. That research used statistical evidence from societies with infant betrothal where the future wives were brought up in their espoused husbands' households. Such marriages had more divorces and fewer offspring than marriages between couples in the same society who were raised apart, despite the fact that the children brought up together were always informed that they were husband and wife, not siblings (Wolf, 1966:883–898). Kibbutzim had some of the same problems with marriage between fellow members (Spiro, 1968:68–79). Familiarity may not breed contempt, but it doesn't seem to inspire desire either. Yet teachers and textbook writers continue to ignore these studies.

Problems also occur with the biological explanation that inbreeding causes genetic damage. The idea that natural selection favors societies that taboo incest is not as likely as it may seem. First, mother-son sexual relations are the only ones universally prohibited; other relatives are not prohibited sexual choices, and some that we regard as too close are actually encouraged or required in some societies. Second, recent biological research shows that first-cousin marriage does not significantly increase the risk of birth defects. I do not know why it took biologists so long to figure that out, because first-cousin marriage has been practiced for generations in some small societies with no apparent biological harm. After all, for inbreeding to cause genetic damage, harmful genes have to be present in the first place. It is at least possible that inbreeding in small societies, before the onset of modern medicine, eliminated any lethal genes rapidly, therefore making marriage with close relatives less damaging.

Some anthropologists invoke political factors to explain religious behavior. Religious prohibitions allow peoples to distinguish themselves from their near neighbors. No respectable anthropologists will state in print, however, that there really may be something to this magic or sacred world stuff. (The Castenada publications of the Don Juan papers are NOT respectable, not because of the mystical aspect, but because colleagues have charged him with plagiarizing their field notes, and with passing off fictional people and events as fact.) Almost all the anthropologists I know have anecdotes from their field experience that are as easily explained by the idea that there is “something there” as by other theories. However, the desired outcomes that occur after ceremonies designed to produce them are usually dismissed as “coincidence”.

Some recent researchers call on psychosomatic factors to explain otherwise inexplicable results. I’ve done that myself. Of course, doctors explain many events now as “psychosomatic” and therefore “scientific”—yet “psychosomatic” is an explanation that doctors a generation ago rejected as “mystical nonsense”. The scientific position is that there **MUST** be some explanation other than the operation of a force or forces undetected by scientific methods. Through measured and studied changes in the immune system, hormone production, or other chemical variations in the blood, most doctors now accept that some kind of mental activity can cause physical symptoms. Even if they are not exactly sure how it works, at least it is no longer labeled supernatural or magical, and so it is available to use to explain otherwise inexplicable results in scientific journals.

Because there have been few reports published by anthropologists of observations or experiences that are not explained by natural secular factors, this talk today must necessarily focus on my own experiences and those reported to me by colleagues in conversations over dinner or drinks. Naturally, we have generally tried to suggest non-supernatural explanations of the reported events—sometimes successfully, more often not.

The first experiences I had were during my initial official fieldwork, with Onondaga Indians in upstate New York. The so-called Long House people believe in a group of very powerful spirits called “False Faces” by non-Indians, which are usually referred to as “The Grandfathers” by Onondagas (who prefer to avoid more specific names). These powerful beings are helpful when treated properly, but when angered they can cause facial paralysis or hemorrhaging. False Faces are described in some of the earliest historical documents. The masks representing these beings are well known in art museums.

I said the masks represent the beings, but a properly made mask is more than a mere representation. It is believed to have power in itself. Making a mask is not just a simple task of carving. First the carver—usually a religious specialist himself (I do not know of any female carvers of genuine full-sized False Face masks)—selects a tree, then performs a ceremony to inform the tree and the spirits what he is about to do. After the ceremony, he begins to carve the mask **ON THE TREE**. Only when it is fully carved is it detached

from the tree, after still another ceremony. It is then hollowed out so it can be worn during ceremonies. It is supposed to be stored in a drawer and covered with a cloth. Hanging it up on a wall is improper (it will make noise and chatter), and it must be fed (with a toasted cornmeal mush) at least once a year. When the mask is worn, the wearer is supposed to borrow all the clothing he wears (women do not wear the masks) so that people will not know who the dancer is (although they normally can make a fairly good guess). The False Faces sometimes dance at privately sponsored curing ceremonies, and they always perform during the Midwinter ceremonies held for the people as a whole. In the curing ceremonies (public or private), the False Faces rub ashes on the heads of people who wish to be treated. (The False Face dancers were fire handlers in the historical reports, but today they just handle ashes, not live coals.)

A diviner normally determines when a sick person needs a False Face curing ceremony, but once a person has been treated by them, a female patient has an obligation to sponsor a False Face ceremony and a male patient is expected to dance masked in the Midwinter ceremony. Photographs are forbidden because they are believed to anger the spirits. The events I observed were explained by the people as (1) a consequence of a young man who had been cured but had not danced for several years, and (2) a consequence of a young man taking several photographs of the masked dancers during the Midwinter ceremonies.

The young man who did not dance when the False Faces performed in the Midwinter ceremonies I observed lived in the house where I was staying. He began having terrible nosebleeds while he slept—sheets had to be changed every night, and when I saw them they looked as if a pig had been slaughtered. He began looking pale. After their first appearance, the False Faces return several days later for a final public curing ceremony. They will make house calls in the interim for anyone who does not wish to go through the public ceremony. The young man's mother sponsored a curing ceremony for him, which I observed. The nightly nosebleeds stopped after the curing ceremony. A psychosomatic reaction caused by the bleeder's belief is the orthodox scientific explanation.

The young man who took the pictures offered copies to me, which I still have. People openly speculated about what might happen to him or his family, because he had given or sold copies to a number of people besides me. People who accepted the pictures were not thought to be endangered. Nothing happened for about a month—then the young man's mother was hospitalized with a lung hemorrhage (she recovered; she had suffered in the past from TB). The young man himself died within two years from a bleeding ulcer. People in the society simply nodded wisely. The reasons for both his mother's sickness and his death were obvious to them. Again, psychosomatic factors are the orthodox explanation, not any actions by spirit beings.

The ceremonial leader in the house where I was staying asked me to take pictures of the private ceremony, but the women who owned the house told

me not to. I compromised by taking pictures from a distance as they approached, and then pictures as they left (which did not include their masks of course). This was acceptable to all parties, and no one suggested there might be any adverse consequences for me (and, of course, there were none).

Other examples involved omens from the spirits. There were a few deaths while I was doing fieldwork as well as afterwards. In one case, an old man was hit by a car. I did not know him well, but the family where I was staying simply said, "He should have known. About a month ago his house almost burned down and someone shot his dog." Both events were warnings that something was wrong—either he was in trouble with the spirit world, or a witch was after him. The fact that he did nothing about it made his death explicable. He should have gone to a diviner to find out what the problem was and held the required ceremony or pacified the witch. Then another man was killed, again by a car. This time the connection with antagonizing the spirit world was made specific. His mother told me that after one of the last ceremonies, he had come to her crying (he was not a young man—he had children in their twenties) because he was afraid. He had made mistakes singing in recent religious ceremonies and people were unwilling to do the ceremonies again to correct the errors. She explained his death that way.

In the third case, the victim (again an old man struck by a car) was an uncle of the people in whose house I stayed. They said they should have known because three weeks before he was killed, one of his buddies had come (drunk) to the house and told them he had seen "Bud" lying dead on the road. They all went out to look but could not find the body, so they assumed it was just a drunken nightmare. But when Bud was killed, it was clear that his friend had had a warning, and so had they; but because no one had done anything about it, Bud died.

All of the men who were killed in these "accidents" were known to be heavy drinkers, so that was the secular explanation. Suicide was also suggested by anthropological colleagues of mine as a possible explanation. Two of the three were said to have stepped in front of the oncoming cars.

On the other hand, Ike, an old man who lived in the house where I stayed, had a death omen—the leather string on his wampum badge of office broke "for no reason". He immediately went to a diviner, who told him a particular ceremony was necessary; he held it and had no further trouble. This was another occasion when I compromised to accommodate their beliefs. Ike wanted me to be in the room where the ceremony was held. The female householder (one of my main friends) was afraid of consequences to me because I would not be likely to hold the ceremonies after I finished my research, and so she opposed the idea. I sat just outside the door of the room where the ceremony was held. Because it was a "dark dance", I actually "observed" as much as I would have had I been in the room. I heard the animal cries that came from different parts of the room as particular spirits visited, and I heard all the singing. This was an incident I never reported in my thesis, because it was

not explicable. I did not question people much about it, but I read about the ceremony in literature. Religion was not my thesis topic, but I knew the Onondaga would simply tell me that the spirits had visited, if they were willing to talk about it at all. A secular explanation would probably have included ventriloquism. Ike had no further problems and lived for a number of years afterwards, even though he was close to eighty when it happened.

Onondaga do not believe in accidents. When people are killed in what we would call an accident, their assumption is that one or more of three things happened: (1) the person was behaving foolishly, (2) the person was in trouble with the spirit world, or (3) a witch was after the individual. These are regarded as natural, not supernatural, explanations by the Onondaga. I learned about this through more research than I have time to report, but one incident will illustrate why I investigated the topic. Onondagas, like Mohawks, are often high steel construction workers. A tall structure in Syracuse was being built while I was doing my research. Two Onondaga men on the job died in a fall one day. The son of the woman in whose house I often stayed was working on the same building. I asked him if it did not make him nervous when the men fell. He looked at me oddly and said, "Of course not, they were racing." I was a bit puzzled by this answer and showed it, so he went on: "I know that if I hold a plank wrong, and the wind catches it, it will flip me off the beam immediately, so of course I was not nervous." This was not the answer I expected or understood (that knowledge would have made me afraid *before* anyone fell), so I followed up on it and finally realized that he was not nervous because he knew what he was doing, and would not do anything foolish; therefore he would not fall off the building. Another worker told me that he might be nervous for a couple of hours if he started work on a building when it was already ten or more stories high, but if he "went up with the building", he would not worry. Interestingly enough, Onondaga are also very much aware of the physical symptoms of anxiety. In fact, when I attempted to administer a questionnaire from Cornell that was aimed at studying symptoms of underlying unrecognized anxiety, the results had to be thrown out because every time a respondent answered "yes" to the question of whether his or her hands or feet sweat unduly, he or she invariably added, "That's a sign of tension, isn't it?" or "Only when I'm nervous".

Navajos, like Onondaga, tend to attribute sickness to witchcraft or other supernatural involvement. They, too, regard these explanations as natural, not supernatural, and have a number of ceremonies to ward off problems, as well as diviners to determine just what the problems stem from. The only specific incident that I observed in my Navajo research that would fit this article involved one of our health visitors who got pregnant. Because she was working at our non-Navajo medical clinic, she did not feel it was appropriate to have the Navajo ceremony normal for a pregnant woman—a Blessing Way—which is designed to restore or maintain harmony between the patient and the sacred world. She had a miscarriage. The next time she got pregnant, the medical

doctors in the clinic insisted she have the Blessing Way, and even helped pay for it. She had a healthy child. Psychosomatic or coincidence were the doctors' orthodox explanations.

Most of the Navajo and the Onondaga experiences could be explained this way—except for the “forewarnings”, which, because they were reported after the fact can be dismissed as selective memory. I certainly never would have mentioned any of them in any reports except as interesting behavior or beliefs.

The final experience I will report is one that happened to me at home, not in the field, and that is dismissed (scientifically) as coincidence. I was called to come home early one day because the gas company had found a leak, cut off the gas, and dug up my lawn. They fixed the leak and filled in the hole, but they could not turn the gas on, because that required a plumber to go into the house. The plumber could not turn on the gas, however, because his work reconnecting the pipes had to be inspected and approved by a gas company inspector. The inspector would not come until the plumber had done the work, which the inspector would approve and then the plumber would turn the gas on. The coordination of these two specialists, both of whom were predictably busy and could not idly wait around for the other, appalled me. I called both and went home to wait. I was watching at the door for the arrival of one or the other when a car pulled into my driveway. It had no commercial markings on it, so I went out to see what it was doing there. An elderly woman was in the car, just sitting. I asked if she was all right and she said yes. I asked what she wanted and she asked me if I would start her car. We discussed this a bit. I reluctantly got in the car to try to start it and discovered there were no keys in the ignition. Obviously, the woman had to have had keys to get to my house, so despite her assurances that she felt fine and the only problem was getting her car started, I excused myself and went in the house to call 911. A policeman came and spoke to both of us, separately. He managed to get a phone number from the woman and called her husband, who came to get her. The policeman told me that the woman had been to a beauty salon in another town and going home (in the other town) had ended up in my driveway, which is not on or near any route from the other town.

After I watched the husband, the wife, and the policeman leave, I said, out loud (half joking), “OK, send the others.” Before I turned away from the door, the plumber drove up, and before he was out of the car the inspector came. Within a few minutes, my house had gas and heat available. Coincidence? Do you realize just how many coincidences were required for this? At least four, possibly five. My gas line had a leak, which was discovered and repaired by the gas company that day. I came home at a time I would not usually have been there. I was watching at the door when the woman drove in the driveway, which I would not have done had I not been waiting for service personnel. My house is not on a main street, nowhere near the route that the woman had to take from the other city. She chose my driveway out of over a hundred thousand she might have picked, while I was watching. After

the complicated sorting out of the problem, both the plumber and the inspector showed up within the same two minutes. I have more problems accepting all these coincidences, which were essential for the result, than I do believing that some process I do not fully understand was operating to get both me and the woman the help we needed in a timely manner.

Now oddly enough, the real problem with reporting these observations is not that scientists believe that the supernatural does not exist, which is what most people would say. The difficulty arises because of the basic assumption, which has been globalized, that phenomena in general can be divided into natural and supernatural; that everything can be considered sacred or profane, normal or paranormal, natural or supernatural, scientific or magical. The basic assumption of that division of phenomena, which is held by both scientists and non-scientists alike in Western societies, is the real source of the problem, not that the supernatural does not exist. Years ago the anthropologist Murray Wax (1968:228) pointed out the difficulty with the assumption of sacred/profane when he said that religion was a folk category of Western culture. A folk category is a belief strongly held by the people in a particular culture. Vampires, for example, would be a folk category of central Europeans. Wax's idea has recently resurfaced in an article by Jacob Pandian (2002:11), who said the same thing, but neither included the division between natural and supernatural phenomena, which is part of the same folk belief. The belief in the Christian God is a separate issue from the belief in what we in the Western world call the supernatural or sacred world. Many people who reject the Christian God still have beliefs that we (but not necessarily they) place in the category of supernatural, sacred, or religious.

A number of cultures that do not share all the modern scientific concepts do not divide the world into sacred/profane or natural/supernatural. Phenomena classified as supernatural by Western scientists are simply accepted as natural by people in these societies. There is no supernatural, there are simply things that are easily understood and/or controlled by almost everyone, and those things that are understood and/or controlled only by specialists. Those things need to be dealt with using different techniques, just as building a bridge needs to use different techniques and specialists than roasting a pig. People in these societies usually accept and believe in what we call magic, which refers to the technology they use to manipulate what we call the supernatural. Some of these methods work, some do not.

Underlying explanations of why their methods work (when they do) may be incorrect, but that is not unique to societies that do not distinguish between natural and supernatural. Science has and has had similar problems, of course. Phlogiston is not the source of fire, the sun does not burn with the same fuel as the kitchen stove, maggots are not spontaneously generated in animal dung—all were beliefs held by scientists at some point. Western scientists also believed for some time that infusions of the bark of a special tree held no cure or preventative for malaria (it is a source of quinine), and that herbs used

in India had no ability to calm the nerves (they are the source of the major ingredient in the earliest tranquilizers of modern medicine). These were discoveries of “superstitious natives” and any results obtained by their use of the plants were long attributed to coincidence. Some of the specialists in these topics Westerners call shamans, priests, medicine men, or witch doctors; some we call artists or artisans—but none are called scientists.

People have noticed for years that as scientific knowledge has increased, the realm of the “supernatural” has decreased. Of course it has, because what was formerly regarded as the province of the gods in the sacred world has now been placed in the natural or scientific category, instead of in the supernatural category. When modern scientists do not understand how or why something works, especially if any of the techniques used have been previously regarded as part of “religious” or “occult” behavior, many of them label it as “supernatural or superstitious nonsense” and insist it doesn’t happen at all.

The concept that phenomena labeled as supernatural do not exist is a very difficult problem to deal with because the assumption that “religion” and “supernatural” refer to real phenomena like the planets and stars is so firmly held. Even the people who are the most certain that the supernatural does not exist believe it exists as a category that does not exist in reality. Think about that for a bit.

Until or unless people in general, or at least scientists, finally accept that “sacred” and “supernatural” are only Western folk categories, people working in the areas of research that have been labeled as “supernatural” or “occult” will have difficulty gaining a hearing in scientific circles. If scientists did not believe in a category that they subsequently believe does not exist, many of the problems with research in these areas would disappear.

Are there some other forces operating in the types of cases I have reported, and in similar ones that you may be familiar with? I don’t know, but I think we jolly well ought to be investigating the possibility. So many new “forces” have been discovered by physicists in the last fifty years that it seems the height of folly to ignore the possibility that there are some we have not yet discovered, or that the full effect of some of those which HAVE been discovered is yet to be learned. Are these forces supernatural? No more than gravity is. “Supernatural” is a folk category that has spread with Western civilization.

Note

- ¹ This article is based on a presentation the author gave at the 21st Annual Meeting of the Society for Scientific Exploration, May 28–31, 2002, Charlottesville, Virginia.

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