The purpose of this comment is to suggest a parallel between the theory and method of archaeology and the system of beliefs and practices constituting what I will loosely refer to as magic. Let me emphasize at the outset that I am not attempting either to belittle or to legitimize archaeology or magic. The separate issues of whether archaeological inferences are true and whether magic really produces its claimed or any other effect are irrelevant for present purposes. My motive is simply to provide a whimsical counter-balance to the assertion that archaeology is or should be a serious science by pointing out that the practice of archaeology has many similarities to the practice of magic, and that the basic beliefs involved in even so-called scientific archaeology have more in common with the assumptions underlying witchcraft than with those underlying science.

By the term "magic" I mean attempting to bring about some material result in the real world by means of powers which are believed to be out of the ordinary. I distinguish between magic and science on the assumption that the belief that death can be caused by shooting somebody with a rifle and the belief that it can be caused by sticking pins in a doll proceed from different epistemological and psychological bases. A magician is one about whom somebody believes that he or she has unusual powers. The believer may be only the magician himself; alternatively, the powers may be perceived only by another, the magician being unaware of them, as would seem to be the case in many witchcraft accusations. The more classic image of the magician—the Merlin sort—is one in which both the magician and others acknowledge his magical abilities.

I will proceed by attempting to demonstrate four premises: 1) that a belief in magic is general among archaeologists in that they frequently claim that certain archaeologists possess interpretive abilities that defy scientific or rational explanation; 2) that the mental processes underlying much of archaeological interpretation are similar to magical beliefs; 3) that archaeologists display ritualised behaviour similar to the rituals that often accompany magical practices, and that archaeologists use these rituals, as magicians do, to legitimize their claims; and 4) that some of the social and psychological conditions which are often thought to promote a belief in or a reliance upon magic frequently confront archaeologists in the course of their work.

Beliefs in Magic

That archaeologists expressly believe in magical powers and acknowledge their use in archaeology
can be demonstrated by describing two related phenomena: the MacNeish Syndrome and the Inner Certainty Phenomenon. Both of these are, unfortunately, difficult to document precisely, since they are rarely put into print. I trust, however, that a general description will have a ring of familiarity.

The MacNeish Syndrome is the assertion by one archaeologist that another archaeologist has unusual or inexplicable powers of interpretation. The assertion is typically in reference to pioneering synthetic work done by a well-known archaeologist some time ago in what was then a little-known region, and may take the form: "You know, old Scotty was right after all, but for all the wrong reasons." Two significant things are being said here. The first is that archaeologist X has, or at some dim time and place had, interpretive powers that lack scientific basis and defy rational explanation. The second is that the conclusions reached based on these powers have been confirmed or validated subsequently by more scientific techniques, and therefore the powers themselves are effective in producing true statements about the past.

The Inner Certainty Phenomenon is the reverse side of the coin. It consists of an assertion by an archaeologist that he himself has the inexplicable powers of interpretation described above. Such an assertion typically takes the form: "I haven't got the data to demonstrate it, but I'm damn sure that's the way it was."

The frequency with which the above kinds of assertions are made verbally, and particularly, the degree of conviction with which Inner Certainty assertions are delivered convinces me that many archaeologists believe in the reality of powers which are analogous to magical powers, and further believe in the efficacy of those powers in arriving at true statements about the past. In some cases, these powers are perceived to be more reliable than scientific reasoning.

**Parallels Between Archaeological And Magical Theory**

In attempting to point out the parallels between archaeological theory and magical theory, I will try to turn my extreme naiveté about magic into a virtue by saying that I will keep it simple, and use the Frazerian concepts of Imitative and Contagious magic.

**Imitative Magic:**

The essence of the concept of Imitative Magic is that separate parts of the universe behave in sympathy with each other, and that this connectedness can be manipulated. The theory is that superficial similarities are indicative of deeper and more intimate relationships between objects or events. Witchcraft makes use of this theory by creating the superficial similarities in order to produce or gain access to the deeper connection. For example, if a doll is made to resemble a particular person, then within the tightly circumscribed context of this particular magical act the doll becomes that person, and what happens to the doll will also happen to the person.

It should be apparent that this theory also underlies some time-honoured archaeological concepts, such as ethnographic analogy. In this case, the theory is used to support anything from relatively trivial assertions such as "a stone object that resembles an arrow point was in the past used as the tip of an arrow for hunting animals", to more profound statements such as "A long rectangular pattern of small stains in the ground resembles the outline or floor plan of a longhouse, and therefore, within this interpretive context, is a longhouse. Further, what is true of a longhouse is true of this pattern of stains: it is a multi-family dwelling occupied by a kin-based group of people who in all probability shared many corporate economic and social functions." Note that, in referring to these patterns of stains, archaeologists call them, not patterns of stains, but Houses. The pattern of stains has become the longhouse whose outline superficially resembles, and the inferred deeper relationship forms the basis of archaeological interpretation.

**Contagious Magic:**

Crudely stated, the theory of contagious magic is that objects that have been in intimate contact retain the ability to influence each other after contact has ceased—the physical association of the two objects is thought to produce a lasting and profound relationship between them. Witchcraft can exploit this by, for instance, working magic on bits of a person's hair which retains the ability to affect the person with whom it was once in contact.

Now, archaeologists use a similar although somewhat backwards version of this when they assert the converse: that a relationship between two objects in the past produces an intimate physical association between them in the present, and therefore that two objects that are found in intimate association had some meaningful relationship in the past. This theory is used as the basis for archaeological interpretation when, for example, an archeologist finds deer bones in the fill of a pit.
and infers that the pit was used for storing or cooking venison.

Cautionary Note:
Let me reiterate at this point that the above discussion is not intended to lead to the conclusion that archaeological inferences of the kinds mentioned are wrong, or that archaeologists operate on the mental level of sorcerers.

Parallels Between Archaeological and Magical Ritual
I have arbitrarily selected three categories of behaviour in which archaeologists and magicians display similar sorts of rituals. These are: the use of esoteric paraphernalia, the conduct of seances, and the use of sleight-of-hand or trickery.

Esoteric Paraphernalia:
Both archaeologists and magicians use specialised equipment in their work. They also both use pieces of it as charms or talismans, or as symbols of their profession. Magicians may carry medicine bundles, special stones, or symbols of a guardian spirit. Archaeologists have been known to wear, in contexts where they could have no practical use, knives, tape measures, magnifiers, and programmable calculators. I am currently investigating an unconfirmed report of a line level worn as an earring.

The use of esoteric language by archaeologists takes two forms: the use of highly technical jargon, often invented by the user; and the use of aboriginal phrases, most commonly for site or phase names. The use of technical jargon needs little elaboration, since it is rampant in many professions. The use of jargon borrowed from statistical analysis, computer science and philosophy is perhaps the most prevalent form of esoteric language in archaeology today, and may be analogous to the use of Latin by medieval European magicians.

The use of ancient and mystic speech in archaeology takes the form of using aboriginal site and phase names, and in some very extreme cases, aboriginal phrases for titles of journal articles. In the Americas, the star performers here are those working in the Arctic and Latin America.

Like magicians, archaeologists are also guardians of esoteric or occult knowledge. The use of jargon is one way of protecting the knowledge from outsiders, or even from undesirable insiders. Reluctance to publish or to allow others free access to one’s data is another. For the general public, the questions of how we know where to dig and how we know how old things are seem to constitute the two eternal mysteries of archaeology. That we frequently respond to these questions with sarcasm or expressions of tedium may be an indication of our view that this is somehow secret.

Seances:
A seance is a meeting or performance conducted for the purpose of working magic, or validating a magician’s claim to have magical powers. A typical shamanistic seance may take place in a specially constructed structure away from the residences of the participants. During the seance the room is dark, and special audio-visual effects manipulated by the shaman or his accomplice focus the audience’s attention on certain scenes, objects or actions. Often, the shaman is not clearly visible, and he manifests himself as a disembodied voice separate from the focus of attention. He may be heard to speak in a strange language or about things which make no sense. The special effects will serve to focus attention upon objects or symbols which clearly relate to magic or the supernatural—symbols of the other world, or of the shaman’s guardian spirits, or distant mythological times and places.

The parallels with archaeology are striking. Archaeological seances take place at annual conventions, and are called “papers”. A typical archaeological seance or “paper” takes place as follows:

It is in a darkened room, in a structure rented specially for the occasion—some of the participants may travel thousands of miles to attend. The speaker is barely visible in the dark and is heard as a disembodied voice. A light show manipulated by the speaker or an assistant serves to focus the audience’s attention on a series of brilliant images cast upon a white screen. The images relate to archaeological mythology and serve to reinforce the notion that the speaker is commenting upon reality. One of archaeology’s myths is that it is a discipline that is born of the great outdoors, and flourishes in a natural setting. Almost invariably, some of the images, usually those shown first, are scenes of nature—panoramic views of a vast untrammelled world which, in saner moments, everybody knows does not really exist. This is often reinforced by images of wild animals and plants—archaeology is part of the primitive innocent world, and it follows therefore that archaeological reality is part of the one, true reality.

Another generally held archaeological myth is that archaeology, unlike some of its sister disciplines, is founded upon cold, hard data—solid objects of rock and bone—a far cry from the nebulous, mercuric constructs of social anthropology. The images in the light show almost always invoke the universal belief in this myth. Most of the images shown during the paper will be of solid objects—projectile points, pot sherds, or in the case
of our more fortunate southern, or less fortunate far northern, colleagues, architectural remains. Images may also be of less solid but just as undeniably real things—counts of objects, tables of percentages, or maps of things distributed across a landscape.

Interestingly, the images and the accompanying words may be only very distantly related. Sometimes the speaker will present a discourse on extremely nebulous concepts whose reality is very seriously questionable, while the attention of the audience is purposely directed to a larger and brighter than life image of familiar solid objects—stones and bones. How far is this removed from the Tungus or Evenk shaman who conducts his seance beneath an illuminated image of his guardian spirit, or the Catholic priest who claims to turn wine into blood beneath a brilliant stained glass window depicting scenes from an accepted mythology?

In all of these seances, the manipulation of the ambience of the room and the dramatic presentation of myth-reinforcing images serve a simple but crucial purpose—to remove the audience from its daily reality and transport it to another—a reality in which the myths are once again real and the manipulator of the mythical symbols the source of truth.

It probably goes without saying that during a seance, archaeologists, like shamans, often seem to speak in an unintelligible language, or to talk about nonsensical things.

Finally, it has been a feature of some types of seance, such as the meetings of medieval witches' covens, that narcotic substances are consumed to induce states of altered consciousness conducive to the desired perception of reality. The role of this activity at archaeological conferences hardly needs to be emphasized. It might be worth noting, however, that I have several times heard people who were about to deliver papers express the hope that the audience had not been neglectful of this important ritual preparation. I have even known people to go so far as to take potential members of the audience into the room set aside for this purpose and buy them large quantities of the required sedatives shortly before giving the paper. This sort of dedication among shamans is, unfortunately, rare.

*Sleight of Hand, or Trickery:*

Although sleight of hand tricks are known among archaeologists, they are not as common as sleight of mind or sleight of mouth tricks. These involve the clever manipulation of words or ideas for the purpose of inducing an audience to believe what they would otherwise never believe, without actually lying to them. One of the most fertile fields for this is the interpretation of radiocarbon dates. The very format in which the dates are reported is a form of sleight-of-mind—there is a date, or an age, and then, secondarily, an error factor, which is often taken to mean, and often presented by the archaeologist as meaning, that the date may not be exactly bang-on. The reality, as everybody deep down inside knows, is nothing of the sort. Among the most dramatic radiocarbon tricks is making a troublesome date disappear or, short of that, sawing it in half.

*Circumstances Conducive to Magic*

In general, it is thought to be conditions of uncertainty or feelings of lack of control that promote a reliance on magic. If this is so, it is understandable why archaeologists employ or believe in magic in their work. Feelings of uncertainty about or lack of control over the outcome of one's efforts is endemic in archaeology. One cannot accurately predict, nor control, the number or kinds of sites found in a survey, nor the recovery of appropriate kinds of data in an excavation. Moreover, the sorts of objective interpretative techniques one can apply are more than likely not to turn out as one would like or expect. Under these circumstances, belief in and reliance on extra-scientific methods is not surprising, nor is it an unreasonable response.

Even more critical is the problem of validation of results. Magicians must occasionally explain why their magic doesn't work, or must convince their audience that they have actually performed some magic whose results are not objectively verifiable. A faith healer, for example, might have to convince his audience that he has restored hearing to a deaf person. (Perhaps it is significant that they rarely restore missing legs to one-legged people.) The problem is that of sustaining belief in the absence of any objective means of verification. We have noted that magicians use words, symbols and actions to promote a belief in their powers under these conditions.

In archaeology, the verification problem is acute. For instance, if one claims that the shape, distribution and contents of a certain type of feature lead to the conclusion that it was used for smoking hides, where do we look for verification? My contention is that archaeologists solve this problem in much the same way that magicians do. They use words, symbols and actions to promote confidence in their abilities (often referred to as "competence"), and thus, by implication, in the validity of their claims. They associate themselves
with accepted symbols of competence; they make their claims at seances where they manipulate symbols of archaeological mythology; and they verbally reassure each other of the existence, and efficacy, of inexplicable interpretive powers.

A Final Cautionary Note

In closing, I must emphasize that none of the above discussion should be taken to suggest that archaeological methods do not work, or that archaeological inferences are not correct. I have tried to suggest that archaeologists confront the same kinds of situations and socio-psychological problems that confront magicians, and the two groups of practitioners use similar techniques to overcome them. If there is any validity to the suggestion that archaeology is more like witchcraft than like science, this leaves completely unaddressed the question of which of those two produces the more acceptable or satisfying results.