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World's Oldest Ritual Site? The "Python Cave" at Tsodilo Hills World Heritage Site, Botswana

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While most archaeological excavation is routine and the findings are mainly of research interest to scholars, sometimes very significant discoveries are made that are of great public interest and newsworthy. In most cases international news coverage of such high profile discoveries is released so as to coincide with publication of the findings in peer reviewed journals where the data, interpretations and conclusions are stated and can be examined. This procedure serves to eliminate the wheat from the chaff and acts as a check on the dissemination and perpetuation of sensational claims that have little or no evidence to support them. In this age of the Internet, news of what appears to be sensational findings often has popular appeal and the misinformation can snowball and gain credibility, even when the supportive evidence is shaky, at best. But, as J. R. R. Tolkien and others have said "all that glitters is not gold." Unfortunately, we believe that this has happened in the

case of the recent news about the Tsodilo Hills "Python Cave" in the Kalahari of Botswana with regard to the claims made by Sheila Coulson of the University of Oslo that it is the "World's Oldest Ritual Site." Eurekalert, Fox, Scientific American and other online news services have repeated this to the point where one would think that it is an established fact. Here are some examples. Scientificamerican.com, December 1, 06 has the following caption: "Offerings to a Stone Snake Provide the Earliest Evidence of Religion: 70,000-year old African ritual practices linked to mythology of modern Botswanans." There are other sources available on the Web.

In Archaeology Magazine's World Roundup section, March/April 2007 issue, page 10 there is a brief description of what may be "remains of human-kind's oldest known ritual," found in a cave in Botswana. The World Roundup also mentions that "others are skeptical of the interpretation." We represent the skeptics and would like to present our views so that others, especially archaeologists working in Africa, will be aware of some of the problems regarding the evidence supposedly demonstrating that the "Python Cave" is the World's Oldest Ritual Site. As will be shown, the linkage between data, bridging arguments and the interpretations are either weak, or non-existent.

The site in question is actually known as Rhino Cave, named by us after the painting of a rhinoceros in white, bifurcated by a water seep from above, exposing a red finger-painting of a giraffe and geometric design. Rhino Cave contains Middle Stone Age, Later Stone Age and Iron Age deposits. We only learned about the remarkable transformation of Rhino Cave to the "Python Cave" when a colleague found the news on the Web and asked whether we knew anything about this site. The cave itself is a small, naturally concealed fissure located on Female Hill situated near a large specularite mine. We were the pioneering investigators of Rhino Cave in 1995 and 1996, along with colleagues from the National Museum of Botswana. Our findings were published in two articles that have not even been mentioned by Coulson in the dissemination of the Internet news cited above (Robbins et al. 1996 and 2000a). These articles, together with a paper presented at the 14<sup>th</sup> Biennial SAFA meeting held at Syracuse, N.Y. in 1998, provide a detailed description of the stratigraphy, paintings, wall depressions, dating and artifacts. As noted in both publications, one wall of this small

cave contains over 300 small depressions or cupules, as they are sometimes termed by archaeologists. The interpretations featured in most, if not all, of the Internet news released by Coulson is that the depressions collectively represent the image of a python. This interpretation is highly subjective and is speculative at best. The evidence supporting that the depressions (or snake scales) date to a single period does not exist, and as far as we are aware, there is no dating method available that is capable of confirming this assumption. In fact, many of the depressions are very fresh while others are covered by a heavy patina. Although we have extracted dateable organic material from one of the depressions, the radiocarbon date only provides a minimum age (Brook et al. in preparation). It is useful to point out that there are over 20 other sites with cupules at Tsodilo recorded by one of us (AC) and none of these sites can be construed to represent snakes or other animals. One site fairly close to Rhino Cave has over 1,000 cupules and grooves ground into one wall appearing as a solid block of carving and do not represent any mythical animal (Robbins 1990). While the link between the patinated cupules and the Middle Stone Age deposits at Rhino Cave is possible, it needs to be demonstrated by refitting the evidence reported to have been found in the deposits to the place on the wall of the cave where it was supposedly derived (or at least demonstrating that the finding is not simply another grindstone). As yet, there is no 70,000-year-old date available on the Middle Stone Age deposits at Rhino Cave. Our published radiocarbon and TL dates for the MSA of Rhino Cave are about 15,000 years old and they are too recent for the Middle Stone Age (Layer D= 14,500 ± 50 BP, Layer  $F=15,488 \pm 2440$ , TL age). These comparatively recent dates that were recovered from directly within the MSA deposits reveal difficulties in accepting an absolute age for the MSA deposits of Rhino Cave. They also quite clearly provide no support of 70,000year-old rituals.

In archaeology there is a long, critical history of the use of ethnographic analogy in archaeological interpretation. A sample of early some of the early work in this area includes Ascher (1961), Binford (1967), Yellen (1977), and Gould (1978). Most workers in the field today would strongly object to the projection of modern beliefs directly back into the past to 70,000 years ago The "python cave" story does just that by reinterpreting the Rhino painting,

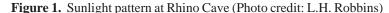
done in white, as an elephant and noting that pythons (the supposed representation of the cupules and grooves on the wall), elephants, and giraffes (the red painting) are important in San (Bushmen) mythology. The other red geometric paintings on the cave wall are ignored. The interpretation of the paintings in relation to San mythology is subsequently projected uncritically into the remote past to support the claims about the world's oldest ritual site. We stress that the oldest of the paintings at Tsodilo are probably no older than ca. AD 600 (Campbell et al.1994). This age assessment is based on the presence of red paintings of cattle that were introduced to the area at about that time, and the stylistic similarity of the cattle to other animals. At Tsodilo, the white paintings are more recent than the red ones, based on superimposition and other factors. Generally speaking, rock art experts agree that red and white paintings in southern Africa represent two different periods and are associated with different ethnicities. Making a composite story out of this "evidence" that ignores the different histories and meanings of this art so that it fits an interpretation that is based on a supposed snake that is not dated is a real stretch of the information. It is flat out, misleading.

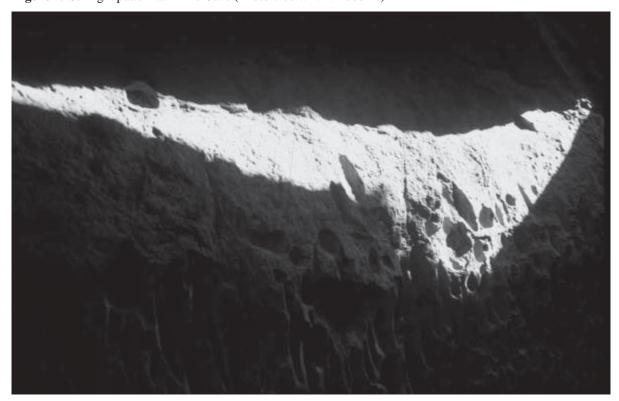
The offering as a sacrifice of burned Middle Stone Age points made from distant raw materials to the python is another important facet of the interpretation. Here, we need to state that the use of nonlocal raw materials during the MSA is not unusual as our findings at Rhino Cave and White Paintings Shelter demonstrate. For example, in the MSA levels of White Paintings Shelter an average of 55% of the raw material, including debitage consisted of non-local raw materials and this percentage is much higher for the MSA points (Robbins et al. 2000b and see Murphy 1999, Table 32). The most likely explanation for this is raw material exchange between groups, rather than ritual. The discovery of burned artifacts is also not surprising among MSA peoples who appear to have used hearths on a regular basis in southern Africa, and in an area like Tsodilo that is frequently swept by brush fires. In foxnews.com Coulson states: "No ordinary tools were found at this site." This is simply not the case since we excavated numerous well made scrapers in the MSA levels within two meter's distance from the wall with the depressions (Robbins et al. 2000: Table 2). If scrapers are not ordinary tools, what are they? The many hundreds of flakes recovered in the MSA levels in our work (again within a short distance from the wall), along with some of the cores that yielded the flakes also implies that tool manufacture was an ordinary activity at this site, just as it was at numerous other MSA sites in southern Africa.

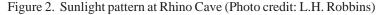
The interpretation also reports on the existence of a "secret chamber" behind the python wall rock where San shamans may have conducted rituals. According to Coulson in foxnews.com: "The shaman, who is still a very important person in San culture, could have kept himself hidden in that secret chamber." "When he spoke from his hiding place, it could have seemed as if the voice came from the snake itself." As far as we are aware, there are no records of San Shamans even using secret chambers in caves, nor is there any convincing evidence that the space behind the rock was used in this way at all, much less 70,000 years ago.

We do agree with Coulson on one point. Changing patterns of bright sunlight briefly move across the wall with the depressions, highlighting some of them, but, in our opinion it is uncertain whether these light patterns have any prehistoric cultural significance at all, or whether they are coincidental. The sunlight shines through a small opening at the rear of the fissure cave. We noticed these sunlight patterns while excavating at the site during the afternoon in late July, 1995 (during the Southern Hemisphere Winter) and the photographs shown here were taken by one of us on July 25, 1995 between 3:30 and 4:00 PM (Figures 1 and 2).

In conclusion, it is of great interest to trace the origins of ritual behavior. The famous Sima de los Huesos (Pit of Bones) at Atapuerca in Spain, which contains a large number of human remains, has been cited as providing possible evidence for ritual disposal of the dead during the Middle Pleistocene. This site is considerably older than the 70,000-year-old date posited by Coulson for Rhino Cave (Arsuaga et al. 1997). It wasn't that long ago in the history of discarded interpretations in archaeology that the cave of Regourdou located, near Lascaux, in France was presented in many introductory text books as containing compelling evidence of ritual burial of bear bones by Neandertals. At Regourdou, the findings were uncritically supported by ethnographic analo-









gies from modern societies such as the Ainu of Hokkaido, in northern Japan, and other northern hunter-gatherers who had "bear cults." The Neandertal bear cult evidence is no longer accepted. Clearly, the example of Regourdou shows that there is a need to exercise great caution in archaeology when making claims about the oldest evidence for ritual. The exercise of caution is all the more important because of the impact of the Internet news described above.

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