

The exhumation of the corpse, however, raises more troubling questions. Holmstedt calls the act "disgusting." Kao correctly points out that Davis did not just witness a grave-robbing, he commissioned it by paying a bokor to make zombie powder for him. The exhumation, though, does not bother Schultes: "I think they exhume people all the time. I don't see any problem there." Mark Plotkin, an ethnobotanist at the World Wildlife Fund and a former student of Schultes, says that Davis did not pay the bokor to exhume corpses, he paid for zombie powder.

DeVore, however, says that Kao might have a point. "I think the issue is whether Davis paid someone to do something he never does, or rarely does, or paid him to do something he routinely does," says DeVore. "There is a difference."

Says Timothy Plowman, an ethnobotanist at the Field Museum in Chicago: "We're expected to participate in a lot of weird things in the field that we wouldn't do back home." DeVore adds that "anthropologists are forever witnessing something illegal." In his own research on the bushmen of the Kalahari, for example, DeVore says that "there is elephant poaching going on all around us."

Davis defends his actions in Haiti, saying that he simply played the role of participant-observer. In his interviews, Davis often mentions that his work has helped elevate voodoo from a folk cult to a legitimate religion in the minds of outsiders. Some of Davis' critics are not so sure. "Davis complains about the popular accounts of zombies, but here he has contributed to the very same thing," says Holmstedt. Desmangles of Trinity College says that the film made from Davis' book, complete with snakes crawling out of a zombie's mouth, "has taken us back 100 years."

For now, at least, the mystery of the zombies remains unsolved, despite all the noise and attention. For Davis, the zombie research might be over. It will at least have to wait until he finishes two other book projects that are occupying his time these days in Vancouver. Though Davis may make another trip to Haiti, he says he does not plan on becoming a "zombiologist." Says Davis: "My purpose was not to generate absolute truths." Kao agrees with that. ■ **WILLIAM BOOTH**

ADDITIONAL READING

E. W. Davis, "The ethnobiology of the Haitian zombie," *J. Ethnopharmacol.* 9, 85 (1983).

W. Davis, *Passage of Darkness: The Ethnobiology of the Haitian Zombie* (Univ. of North Carolina Press, Chapel Hill, 1988).

T. Yasumoto and C. Y. Kao, "Tetrodotoxin and the Haitian zombie," *Toxicon*, 24 (No. 8), 747 (1986).

Japanese Views on Science Compared to U.S. Attitudes

The Japanese are less inclined to irrational scientific beliefs than Americans, more inhibited about research in controversial areas, and less optimistic about the promises of automation, according to recent polls in which similar questions about science were asked in Japan and the United States.

Some of the results have been published for the first time in the National Science Foundation's biennial report on manpower and research trends, *Science & Engineering Indicators—1987*.

The data on Americans' attitudes about science were collected in a national survey of 2005 adults taken for NSF in 1985 and 1986 by the Public Opinion Laboratory of Northern Illinois University. A similar survey, using many of the same questions, was conducted by the office of the Japanese Prime Minister in March 1987.

Sizable majorities in both countries think the benefits of science and technology outweigh the harmful results. However, interesting differences appear on individual items. For example, the impact of science and technology on "the individual's enjoyment of life" was judged to be positive by 69% of Americans but only 46% of Japanese. More than 40% of both samples thought the impact on "moral values" is negative. But 25% of Americans saw a positive impact compared with 5% of the Japanese.

Striking differences between the two nationalities emerged with regard to views about the effects of science and technology on work and employment. Among Americans, 79% thought the effects positive; only 40% of the Japanese did. The Japanese were more pessimistic about automation, with only 13% believing that it will create more jobs than it eliminates—compared with 48% of the Americans. Americans also felt much more strongly that automation is necessary to meet foreign competition.

In the category of "acceptance of scientific thinking," the surveys revealed that both Japanese and Americans believe smoking is bad for health and accept the theory of continental drift. But high proportions of Americans—between 43% and 47%—expressed disbelief in human evolution, belief in the alien origin of UFOs, belief in "lucky numbers," and belief that rocket launchings change the weather. Only 34% of Japanese believed in UFOs, and only 12% rejected evolution. The report notes that even at the highest educational level, "about one-fourth of Americans with graduate degrees believe space activities affect the weather, believe in lucky numbers, or do not believe in evolution."

Japanese also demonstrate much more conservatism when it comes to research and government regulation. Whereas 68% of Americans favor research to expand the human life span to 100 years, 64% want studies that might discover intelligent beings in outer space, and 52% want research on creating new life forms, the comparable percentages for the Japanese were 20%, 36%, and 10%.

"The Japanese public is much more willing than the American public to stop research in certain areas," the report noted. A full 67% said no to research that could lead to new forms of animal or plant life, and 44% oppose research on weather modification, compared to a 60% approval in this country.

Scientists stand in high regard in both countries, but Americans (55% of the sample) are much more likely to believe that "because of their knowledge, scientific researchers have a power that makes them dangerous." Nonetheless, the Japanese, unlike the Americans, favor more government regulation on food additives, atomic power plants, pharmaceuticals, and genetic engineering.

The NSF report also relates that the Challenger disaster and the Chernobyl accident do "not seem to have harmed the generally high level of public support for science and technology." The same group of American respondents was questioned before and after the Challenger accident, and it turned out that the number who thought that the benefits of scientific research in general and the space program in particular exceed the risks actually went up after the accident. ■

CONTANCE HOLDEN