BEHAVIOR

Cultists: An 'intense ideological hunger'

Who joins a religious cult? Who stays and remains fanatically devoted to the group's leader, perhaps even to the point of willingness to die for that leader? Two UCLA behavioral researchers have addressed these and other questions in interviews and psychological testing of 50 members or former members of a variety of religious cults.

J. Thomas Ungerleider, a psychiatrist, and David K. Wellisch, a psychologist, divided their subjects into four categories—those who remained in cults, returned to cults after deprograming attempts, did not return after deprograming and left cults voluntarily without deprograming.

They report in the March American Journal of Psychiatry that "all persons tested were normal on all aspects of the mental status examination" and IQ measures. Across all four groups, the subjects exhibited what Yale psychiatrist Robert J. Lifton has termed "strong ideological hunger." "These cults appear to provide, at least for a time, nourishment for these ideological hungers as well as relief from the internal turmoil of ambivalence," report Ungerleider and Wellisch.

There are differences, however, among the groups. For those who tended to drop out without outside intervention, "the needs were less intense for a safe, structured, predictable environment which would permit relatively conflict-free emotional affiliation with others," say the researchers. The other three groups appeared to join religious cults "out of intense needs for such structured opportunities to make emotional connections with others, which they had viewed as highly difficult before they joined the groups."

A safe environment, however, does not seem to be enough to hold many persons in a cult. Those who left after deprograming reacted negatively "to a sense of being dominated and forced into an unendurably submissive role." Those who stayed, though, perceived their roles far differently and actually felt dominant themselves. Finally, the data suggest that cult members might feel hostile toward their leaders, but such feelings would be heavily repressed or denied. If so, then such hostility "might be projected onto figures outside the cults," they say.

Washoe loses second baby

Fame and professional accomplishment aren't everything — not even to a chimpanzee. Washoe, the widely known "talking" chimp (she has a 240-sign vocabulary) today sits silent in a corner of her cage at the University of Oklahoma. For the second time in the last three years, Washoe has lost a baby. The first died a few hours after birth in 1976, but the second, Sequoyah, succumbed to a puzzling ailment nearly three months after his birth, Jan. 8.

Apparently recovered from an infected toe, Sequoyah came down with what looked like a simple cold. But the infant was still not grasping his mother with his feet and was growing noticeably weaker. Since the baby's birth, there had been problems in getting Sequoyah to be nursed by Washoe (SN: 2/3/79, p. 73).

The worried trainers began to tube-feed the baby through his stomach, but it was too late. Sequoyah died on March 5.

"We gave him CPR [cardiopulmonary resuscitation]. . . . We even gave him a shot of adrenalin to try to get his heart going, but it was too late," said psychologist Roger Fouts, Washoe's mentor.

According to Fouts, Washoe seemed to realize what was happening and at one point signed, "My baby, my baby!" Fouts is trying to find another baby chimpanzee for Washoe to see if she can teach — without human assistance — sign language. "Washoe is still depressed," Fouts says. "I told her he was dead... she reacted by looking up at nothing in the corner of the cage.... We are trying to give her support, and that seems to help."

SCIENCE & SOCIETY

NRC closes five nuclear power plants

Because of a simple arithmetic error, five nuclear power plants scattered along the East Coast were ordered shut down last week — at an estimated cost to customers of \$400,000 per day for replacement fuel. The Nuclear Regulatory Commission closed plants in New York, Pennsylvania, Maine and Virginia after discovering that a formula, out of use since 1972, for calculating earthquake stresses on some cooling pipes (though not the main cooling pipes) subtracted some stresses instead of adding them. As a result, the supports for the pipes are one-third to one-sixth the NRC-required strength.

The design error was not spotted by an NRC inspection, however. Engineers at one of the plants, the Duquesne Light Co.'s Beaver Valley plant in Shipping Port, Penn., found last December that the valves required under current specifications for the piping system were much heavier than those used when the plant was built. The power company alerted the NRC, who contacted Boston-based Stone & Webster, the firm responsible for design, and uncovered the incorrect calculation. According to the NRC, only four other plants - Virginia Electric and Power Co.'s Surry 1 and 2 at Gravel Neck, Va., New York Power Authority's James Fitzpatrick plant at Scriba, N.Y., and the Maine-Yankee plant run by Maine Yankee Atomic Power Co. at Wiscasset, Me.used the same design. The plants are not located in an "earthquake-prone" area—the chance of a quake is estimated at one every 10,000 years—but in the worst case, if the pipes broke during a tremor, the reactor could lose its coolant, overheat and melt, releasing radiation into the environment.

The NRC's decision to close the plants was criticized as an overreaction by members of the Senate energy conservation and regulation subcommittee and by executives at Stone & Webster. The Union of Concerned Scientists, however, defended the shut-down, although they charged that the NRC had been aware of the design error since 1974. Observers estimate the plants will be down for six months, affecting more than 13 million people and requiring an additional 200,000 barrels of oil per day.

World Climate Program gains clout

In a sort of bureaucratic rite of passage, the idea of an international climate program was given official clout by a "conference of experts on climate" who met recently in Geneva, Switzerland. Sponsored by the World Meteorological Organization, the World Climate Conference, held Feb. 12 to Feb. 23, gathered approximately 400 climate researchers who attempted to outline the major and most trouble-making junctions of climate and society. Though nothing new was said— CO_2 is the research priority and Third World countries suffer most from climatic disasters—the size of the meeting, its internationality and the accompanying hoopla directed attention toward the economic, political and social vulnerability of humans to climate. As one participant said: "It was a necessary international consensus on what the sub-groups already think are the problems."

The major outcome of the conference, however, was the official stamp it put on the wmo-proposed World Climate Program. Having tallied the global climate problems, the conference concluded that the World Climate Program was the best solution. Said one researcher: "The wmo needed to certify international opinion for the program.... It [the decision] may have significant impact in pursuit of [the program]." As now proposed, the program will have three parts: climate research — to fill the footsteps of the to-be-phased-out Global Atmospheric Research Program, a study of climate impacts on society and a climate data service — designed particularly for developing countries. Armed with the conference's blessing, the World Climate Program will be debated at a wmo congress in April.

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