

behavioral sciences

SOCIAL PSYCHOLOGY

The meaning of cooperation

Students of the psychology of negotiations have devised a number of games designed to reveal the important factors that influence negotiation behavior. One significant factor has been the negotiators' attitudes toward cooperation versus competition.

A multinational experiment indicates, however, that cooperation can have several meanings. The experiment, carried out in five locations in the United States and three European universities, indicates that for some persons cooperation has a connotation of morality and honesty, while for others to be cooperative is to be weak or passive.

The meaning of the concept has an effect on negotiation behavior, says Dr. Harold H. Kelley of the University of California at Los Angeles, reporting for the nine-man team of experimenters in the November *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY*.

When cooperation is defined in moral terms, those judged to be cooperative are not much more successful in their negotiations than competitive subjects, he says. When cooperation is seen as a dynamic process, cooperative types were significantly more successful in reaching mutually advantageous solutions to the game than competitive subjects, he says.

SOCIOLOGY

Pornography and sex offenders

A sample of rapists, child molesters and steady customers of an adult bookstore all had less exposure to pornography in their teens than a group of normal adults, report Drs. Michael J. Goldstein of the University of California at Los Angeles and Harold S. Kant of the Legal and Behavioral Institute of Westwood, Calif. in the December *PSYCHOLOGY TODAY*.

The study was one of those used by the Commission on Obscenity and Pornography (SN: 10/3, p. 284) to decide that restrictions on explicit sexual material for consenting adults should be eliminated.

ARCHAEOLOGY

Mapping Teotihuacán

The Spanish conquerors of Mexico in the 16th century were astounded by the vast and majestic urban complexes that had been constructed by the conquered Indians—cities on a scale greater by far than what they had experienced in the Old World. The Aztec city of Tenochtitlan, now the site of Mexico City, is estimated to have had a population of 250,000 to 500,000 at the time of the conquest.

Several other population centers had already lived and died by the time the Spanish came. One of the most prominent was Teotihuacán, about 25 miles northeast of Mexico City, which was violently destroyed some time between the 8th and 10th centuries.

Dr. René Millon of the University of Rochester has combined large-scale photogrammetric maps of the area with intensive field reconnaissance to produce an archaeological map of the city at a time rather late in its history, about A.D. 600. From his investigation he con-

cludes, in the Dec. 4 *SCIENCE*, that the city at that time probably had a population of 125,000, and possibly more than 200,000.

POLITICAL SCIENCE

Development and social indicators

A prominent theory of political development, largely the work of Dr. Daniel Lerner of the Massachusetts Institute of Technology, holds that the development of democratic characteristics follows an increase in urbanization, education and communications channels.

The Lerner theory has gained some support from studies that relate the level of political development of a number of contemporary countries with those indicators. But the argument that development follows increased urbanization, education and communications would be better served by studies over time of individual countries in the process of development.

Dr. Gilbert R. Winham of McMaster University in Hamilton, Ontario, studied the political development of the United States from 1790 to 1960. For each decade in that interval he measured the level of political development—in terms of elected legislatures with opposition parties, direct election of the executive and citizen participation in elections—and compared it to levels of urbanization, education and communications.

He reports in the September *AMERICAN POLITICAL SCIENCE REVIEW* that all three indicators were related to the level of political development, as required by Lerner's theory. Furthermore, he says, increases in levels of education and communications appear to precede political development. When the level of development is compared with the indicators of education and communications of a decade or two earlier, the correlation is even stronger, he says.

ANTHROPOLOGY

Nutrition and cannibalism

Anthropologists and other students of humanity have long been interested in the psychology and economy of cannibalism, and much of the discussion has revolved around whether eating human flesh was primarily a ritual or a nutritional practice.

Earlier this year, in the February *AMERICAN ANTHROPOLOGIST*, Drs. Stanley M. Garn and Walter D. Block of the University of Michigan calculated the amount of edible protein in a 50-kilogram man and concluded that "one man . . . serves 60, skimpily." They suggested that because of this the nutritional value of cannibalism is questionable, unless a group was in a position to consume its own number in a year.

In the December issue of the same journal, Dr. Andrew P. Vayda of Columbia University concedes that regular people-eating may be without much nutritional significance. But he says that irregular cannibalism, which may be the more common case, could have nutritional importance.

He points to the diet of the Maoris of New Zealand, which did not normally include human flesh, but which included cannibalism on the part of warriors on distant expeditions against other tribes. It was precisely on these expeditions, he says, that food was likely to be short.