

Social Sciences Notes

PSYCHOBIOLOGY

New Clues to Memory

Work at the frontiers of brain research suggests the site of memory storage.

Evidence points to protein molecules packed along the surface of the cell membrane and in the space between brain cells or neurons, according to research by Dr. W. Ross Adey at the University of California's Brain Research Institute in Los Angeles.

The protein substances are known as mucopolysaccharides and mucoproteins—that is protein plus other gelatin-like, cell cements commonly found in connective tissue.

These materials, together with the neuron itself, constitute a package that seems to be the information core in the brain.

Using large computers to study brain waves, Dr. Adey found patterns that are further clues to memory processes. There seems to be a "best-fit" pattern in which a wave closely resembles that present when the original information was stored. If so, the new wave would then supposedly recall the original experience.

In describing these waves, the UCLA investigators say they seem to be "whispering together."

PSYCHIATRY

Multistate Data Bank

Five states are expected to join in a psychiatric data bank, the first multistate operation of its kind.

Rockland State Hospital in New York and the state mental hygiene department will set up the system with a Federal grant. Negotiations with four other states are still underway.

The aim is to feed hospital psychiatric records into computers for use not only in individual treatment but also in research and evaluation.

According to the National Institute of Mental Health, the project will assemble data "on a scale hitherto unknown in psychiatry."

It should also upgrade patient care by providing a rapid, efficient flow of information.

Patient confidentiality will be preserved, claims NIMH. But because the information will be used for research purposes, the data bank nevertheless raises the issue of invasion of privacy which has lately plagued the suggested National Data Bank to hold all Federal records (SN: 6/3).

DRUG ABUSE

LSD Users Follow Pattern

LSD users who end up in hospitals resemble the conventional picture of an habitual drug user, reported a medical team from the Langley Porter Neuropsychiatric Institute in San Francisco.

It appears that LSD use is not producing a new type of hospital patient, said Drs. John D. Hensala, Leon J. Epstein and K. H. Blacker. Rather, a group already using drugs has simply added a new agent to its list.

The 20 San Francisco patients examined showed a common pattern—excessive drug use, chaotic sexual behavior, poor work histories, and poor social attitudes—characteristic of drug users in general, the doctors report in the May issue of *ARCHIVES OF GENERAL PSYCHIATRY*.

In other LSD news, the Epilepsy Foundation warned against the drug, citing a case in which LSD apparently triggered convulsions similar to grand mal seizures.

Two University of California doctors report that LSD was the probable cause of two seizures in a graduate student whose family had no record of epilepsy and whose neurological history was entirely normal. In one of the attacks the student fractured two vertebrae.

PSYCHOTHERAPY

Drugs for Diplomacy

Hungarian psychiatrists often use drugs as a matter of diplomacy; there is no other way to slide patients into psychotherapy, a visitor from that country reports.

Hungarian patients do not willingly admit they have psychological trouble, says Dr. Zoltan Boszormenyi, who heads the department of psychiatry at the Central State Institute of Nervous and Mental Diseases in Budapest.

When patients come in with psychosomatic complaints, the doctor is advised to start with some "pseudo-physiological explanation" and to prescribe at least minor tranquilizers. He can then gradually move into more relevant psychological interpretations, Dr. Boszormenyi explains.

In addition, Hungary has a renowned pharmaceutical industry. Even the "not-at-all-seriously-affected mental patient takes it for granted he will be given drugs," says Dr. Boszormenyi, "the more so, because in our country somatic diseases have a higher social prestige than the psychological ones."

He said interviews with the aid of LSD and other hallucinatory drugs have been especially successful in leading patients to open up and be more cooperative.

ANTHROPOLOGY

Monkey Signals Not Language

Monkey language is not a step toward human language, but has more in common with the nonverbal communication of other animals, according to U.S. anthropologist Jane Lancaster in an article published in UNESCO's quarterly *INTERNATIONAL SOCIAL SCIENCE JOURNAL*.

She says monkeys and apes communicate emotions, dominance, submission, certain aspects of mating and the mother-infant relationship, but they are unable to communicate information about their surroundings.

The emotion signals are rich and highly evolved compared to lower mammals, but there is no counterpart to language as humans know it, she says.

Messages exchanged when one animal approaches another often serve to reassert recognized differences in dominance between the two animals. The monkey is able to signal at the same time dominance and non-aggression.