

# behavioral sciences

## SLEEP LEARNING

### Clear-cut evidence

"This is your Russian teacher. . . . You are asleep and relaxed and you can hear my voice, and you will not wake up. . . . You will remember these words forever."

This training tape preceded tapes containing recordings of 12 pairs of Russian/English nouns, played to a group of sleeping students in an experiment to test the possibility of learning while asleep. The tests were conducted by Drs. C. Michael Levy and Wilse B. Webb of the University of Florida at Gainesville. None of the subjects had any prior knowledge of Russian, and the noun pairs used had a zero chance of being guessed correctly.

The average recall for five nights of testing during deep sleep was 13 percent. During light sleep testing, early in the night, average retention scores ranged from 10 percent for the first three nights to 17 percent for the last two nights. When the subjects heard the training tapes during light sleep late in the night their scores ranged from 12 percent to 30 percent retention.

The scientists say that these studies represent the first clear-cut evidence of some possibility of learning while asleep. They further report that the ability to learn while sleeping appears to improve with training.

## SCHIZOPHRENIA

### Tranquilizer treatment

Tranquilizers such as thioridazine forestall behavioral disorganization in schizophrenics and make them less excitable. But recent findings by Dr. Michael J. Goldstein of the University of California at Los Angeles indicate that some schizophrenics may do better without tranquilizers.

Subjects were 56 male schizophrenics at the Camarillo State Hospital. The men who were not paranoid and who had been socially well adjusted before they became mentally ill displaced more symptoms of mental illness under tranquilizer treatment than did those on a placebo. Patients who had not been well adjusted before their illness responded better to the treatment but were not as competent at time of discharge, says Dr. Goldstein.

## PSYCH'ATRY

### Help from Hamlet

Many persons, among them some physicians, know too little about psychiatry. Some even fear it. This seems unfortunate because some data suggest that as many as 40 percent of the public may need psychiatric help from time to time. If a doctor does not recognize the psychiatric factors that accompany some physical ailments the patient may not receive the necessary treatment.

To combat this lack of knowledge about psychiatry, Dr. Frederick W. Barnes Jr. has started a pilot project to educate young medical students at Brown University in Providence, R.I. The program combines clinical psychiatric discussions with live dramatic performances by professional actors, and is designed to give students a close look at how persons with various hangups act.

The actors perform scenes from such plays as "Hamlet," "Death of a Salesman" and "A Streetcar Named Desire." The medical students then analyze the psychi-

atric factors that cause the characters to act as they do. If the students can understand these actions it should be easier for them to identify the same symptoms in patients.

## WOMEN'S LIBERATION

### What the psychiatrists think

Freud was a male chauvinist pig and some of his modern-day successors are no better, or so say many women's lib advocates. The women feel that such Freudian concepts as penis envy and Oedipal complex are degrading to their cause. But this doesn't necessarily mean that psychiatrists are opposed to the feminine movement. Five psychiatrists interviewed in the June 1 ROCHE REPORT see little or no harm in women's liberation and some see far-reaching beneficial effects.

"Women's lib has encouraged many women to become more self-assertive, both in the work area and in their relationships with men," says Dr. Ruth Ann Turkel of the William Alanson White Institute in New York City. Dr. Leonard C. Frank of the Nassau County Medical Center in East Meadow, N.Y., feels that each time the demands of women for equal rights are satisfied there is a step forward for women, for men and for all members of society. Dr. Jordan M. Scher of the Chicago Psychiatric Foundation and Ontoanalytical Institute says that "anything people use within reason to buoy themselves up is certainly legitimate." But Dr. Elanor Paventstedt of Tufts University Medical School, is afraid that women's lib may be hard on preschool children who need their mothers. And finally Dr. Hanus J. Groz of Indiana University says that neither his male nor his female patients have been affected in any significant way by the women's liberation movement.

## SOCIOCYBERNEERING

### Redesigning a culture

Marshall McLuhan, Buckminster Fuller and, more recently, Ralph Nader have campaigned to better the quality of human life. Their main contention is that humanistic ideals must take precedence over or be combined with technology to update and modify the values that dominate society.

In an attempt to do this, a new organization in Miami headed by Dr. Jacque Fresco plans to build a city which will "superimpose a humanistically oriented society over a rapidly decaying culture."

Sociocyberneering, Inc., the name of the group, means "the application of the most sophisticated forms of computer technology in the management of human affairs." By applying cybernetics they plan to build a circular city provided with conveyor systems for people and goods as opposed to cars, trucks or other forms of transportation. The city would be surrounded by an agricultural belt where food would be grown organically and hydroponically without the use of pesticides. All garbage and waste would be recycled and processed for fertilizer, building materials or raw materials. Universities and cultural centers would be provided free.

"We are not preparing to construct a utopia or a Brave New World," says Dr. Fresco. "We are attempting to plant a seed for the development of a sane society in a decaying culture."