

# behavioral sciences

## Memory storage and transfer

Some memories are stored in only one-half of the brain but are available to the other half, say researchers at the University of Rochester. Robert W. Doty and Nubio Negrao electrically stimulated a small area in the right half of a monkey's brain and taught the animal that the stimulation meant food was available. The corresponding area in the left half of the brain was then stimulated and the animal immediately remembered its significance. The researchers next severed the corpus callosum, a large mass of 200 million nerve fibers connecting the cerebral hemispheres. When the monkey was retested, reaction was elicited only from the right hemisphere.

From these experiments the researchers developed a new theory about what the corpus callosum does. First, they say, it gives each half of the brain access to memories stored in the other half. Second, it prevents memories from being stored in both halves of the brain. With this arrangement, twice as many memories can be stored and yet be available to either half of the brain.

## Aftermath of teenage abortions

Adolescence is a precarious time of life because psychic readjustments are being made. Any serious crisis, such as an abortion, can have harmful and lasting effects on psychological development, say Maria G. Perez-Reyes and Ruth Falk of the University of North Carolina Medical School in Chapel Hill. They studied the psychological effects on teenage girls (16 years and younger) of having an abortion. A structured psychiatric

interview (including an MMPI test) with 41 girls requesting therapeutic abortion was followed up six months after the operation with a similar examination.

In the January ARCHIVES OF GENERAL PSYCHIATRY the researchers report that all the patients experienced feelings of depression, guilt and anger during the immediate postoperative period. The intensity and duration of these feelings, however, varied. The most favorable outcome occurred when the patient (not her parents) made the decision to have an abortion and parents, caretaking personnel and friends showed a helping attitude rather than a critical and punitive one.

## Parapsychology might be paraphysics

The parapsychology controversy has usually focused on the existence of extrasensory perception and related intangible phenomena. But that may be a moot question. A questionnaire on parapsychology conducted by the British publication NEW SCIENTIST shows that only three percent of nearly 1,500 responding readers (the majority of whom are working scientists or technologists) consider ESP an impossibility. The rest hold it to be an established fact or a likely possibility.

While most respondents hold ESP to be a legitimate area for scientific study, only 30 percent feel that the parapsychologists are attacking the problem in the right way. Only 20 percent feel that it falls within the province of academic psychology. Quite a few, says the magazine in its Jan. 25 issue, suggested that paraphysics might be a more satisfactory word to employ. Accepting the existence of ESP, most respondents said it is now time to get on with finding out how it works.

## . . . letters

### Forecasting science awards

Joan Arehart-Treichel ponders why so many Lasker Award winners go on to get the Nobel Prize (SN: 12/2/72, p. 365).

It seems to me that she was talking to the wrong people in seeking an answer to this presumed mystery. The fact is that both the Lasker and Nobel Prize winners can be forecasted, and with a given degree of confidence can even be predicted. I indicated this in a paper published in NATURE.<sup>1</sup>

Since she reports that "the members represent the domains of activity of current science," "people who have prominent positions in their field," "who know exactly what is going on in science at the right moment," the results are inevitable.

That certain individuals are not selected who are fully deserving is due to the fact that only a subjective decision can be made regarding two candidates who seem to have made an equal impact on their colleagues. The democratic selection of award winners is essentially a predetermined process which can be measured through citation analysis. The citations reported in the *Science Citation Index* do not cause the awards. The number of citations reflect the impact that Nobel and/or Lasker winners made on their colleagues who must inevitably cite their

work if they publish in well-refereed journals—as most do. As long as scientific communication involves this key process of peer judgment, citation analysis will tell us where the action was, is, and will be.<sup>2</sup>

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1. Garfield, E., "Citation Indexing for Studying Science," NATURE, 227 (5259) pp. 669-671 (Aug. 15, 1970).
2. Garfield, E., "Where the Action Is, Was, and Will Be—For First and Secondary Authors," CURRENT CONTENTS®, #11, pp. 5-8, (March 15, 1972).

### Pseudopatients and criminals

Here I am on my second issue of my subscription and already writing a letter to the editor. The article "Being sane in insane places" (SN: 1/20/73, p. 38) grabbed me where Rosenhan reported the pseudopatients were never detected by the hospital staffs; yet it was quite common for the other patients to detect the pseudopatients' sanity.

This is much in keeping with a theory related to criminals inside jails that is adhered to in Japan, and perhaps comprehended by many American jailers, but rarely articulated.

That is: "Other convicts or prisoners in a given jail or cell inevitably know whether prisoner X is guilty or not. Prisoner X can deny guilt all the way through court, yet fellow cell members can tell whether he really committed the crime or not. Conversely, Prisoner X can confess and even receive sentence, and fellow convicts always know whether he was guilty or not."

The masterful Japanese (under a system that allows for practically unlimited detention; 21 days to start with for incommunicado investigation) save much effort and time by having a cell informer indicate whether a suspect is guilty or not. And knowing that fact, the investigation can proceed accordingly.

I'm suggesting research is in order on the criminal phase of incarceration—if one accepts the uncanniness of asylum patients' high percentage of recognizance—that might bear out D. L. Rosenhan's pseudopatient syndrome spin-off discovery.

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