

PSYCHIATRY

Nightmares Found Useful

➤ NIGHTMARES that fully waken a dreamer prevent "psychologic death." Most of them come during the phase of going to sleep rather than during the waking up process.

The reason for them is that the unconscious mind considers sleep the same as death. When this causes too much unconscious anxiety, the nightmare develops as the psychologic life-saver.

This is part of a new theory of dreams presented by Dr. Bernard L. Pacella of Columbia University, New York, at the meeting of the American Psychoanalytic Association in Chicago.

Dreams serve most useful but simultaneously opposing functions, Dr. Pacella said. This fits with the system of checks and balances in bodily functioning that keeps the body on an even keel, as it were.

The two opposing functions of the dream that comes in going to sleep, Dr. Pacella finds, are these:

1. The dream makes sleep come more easily by creating the fantasy or dream world as a substitute for the real world.

2. At the same time, the dream prolongs relative wakefulness by delaying deep sleep.

At the opposite end of the sleep cycle,

the pre-waking up period, the dream does these opposing things:

1. It prepares the sleeper for wakefulness and facilitates the waking process by bringing into play recent residues of reality life, thus preparing the dreamer for psychological rebirth.

2. It prolongs sleep by presenting a kind of reality to the dreamer and delays a too-rapid waking up, thereby preventing the panic of sudden waking up.

In the normal person, dreams consist predominantly of things seen. A person born blind, however, does not have visual dreams but ones involving hearing, touch and motion sensations.

On the basis of his theory, Dr. Pacella conjectures that some lower animals dream. Theoretically, the dog may dream more of smell and hearing perceptions than human beings.

Dr. Pacella's theory of dreams differs from that of Freud, who held that the dream attempts to prevent the sleeper from being awakened by forbidden unconscious wishes which become stronger during sleep; the dream gratifies the wish in a highly disguised way.

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BIOCHEMISTRY

Summer Health Clue

➤ STUDY of the palms of young women's hands has given two scientists in London a probable explanation of why resistance to bacterial disease increases in summer and why the death rate from influenza, pneumonia and other respiratory diseases is lower in summer.

The explanation is that the part of the adrenal glands producing cortisone, among other important hormones, is more active in summer, P. C. B. MacKinnon and I. L. MacKinnon of Middlesex Hospital and King's College, London, report.

Evidence for increased activity of the adrenals in summer came when the scientists studied summer and winter sweating of the palms of young women's hands. This palm sweating in young women increases when the temperature of their environment is artificially raised, it had previously been reported. The MacKinnons therefore expected to find palm sweating varying with the seasons.

So they counted the number of active sweat glands of a small area of the palms of five women aged 18 to 20. They found, however, significantly fewer active sweat glands in August than in February. The body temperatures of the young women were about three-tenths of a degree Fahrenheit higher in August than February. This meant the suppression of sweating in August could not be a heat-regulating matter.

When adrenal gland cortical hormone was injected under the skin, sweating of the palms was suppressed. From this and other indirect evidence, the MacKinnons believe that the paradoxical suppression of palm sweating in summer is due to increased adrenal gland activity and that this also explains various other summer phenomena of previously unknown cause.

Included in these are the increased disease resistance and lowered respiratory death rate. The MacKinnons report their findings in *Nature* (April 28).

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MARINE BIOLOGY

Playful Porpoises Are Camera Hogs

See Front Cover

➤ A CAMERA HOG is the porpoise shown on the cover of this week's SCIENCE NEWS LETTER. The diver at Marine Studios, Marineland, Fla., can get plenty of pictures of porpoises with his underwater camera, but has a hard time shooting anything else in Marineland's oceanarium because the playful porpoises pose all too enthusiastically.

Science News Letter, May 12, 1956

● RADIO

Saturday, May 19, 1956, 2:05-2:15 p.m. EDT
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS Station.

Milton Rosen, technical director of Project Vanguard, the earth satellite program, Naval Research Laboratory, will discuss "Satellites in Our Sky."

WILDLIFE

Steelhead Tabled With Yellow, Plastic Tags

➤ FISHERMEN on the Columbia River may find some of the steelhead they take will have a 12-inch, bright yellow, hollow, plastic streamer tag attached to the fish's body.

Threaded with a special needle at the base of the dorsal fin, the tag bears a number and the wording, "Return, Oregon Fish Commission, Portland" or "Return, Washington Department of Fisheries, Seattle."

The plastic tag is a new type of marker for the Columbia River. It is a modification of the so-called "spaghetti tag" that has been used on tuna in California.

"Purpose of the steelhead tagging," stated George Y. Harry Jr., director of research for the Oregon Fish Commission, "is to determine the size of the run that comes into the river, the tributaries to which they are headed, the time of passage, and the method of recovery. More than 2,500 steelhead have already been marked in this new study."

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PSYCHIATRY

Men Only Suffer Telephone Anxiety

➤ OUR MODERN LIFE has produced a new disease, "telephone anxiety."

So far it has been found only in male patients, Dr. Herbert I. Harris of the Massachusetts Institute of Technology reported at the meeting of the American Psychoanalytic Association in Chicago.

The patients are afraid of being cut off by the person at the other end of the line.

"The source of the anxiety appears to lie in the threatened danger to the voice as a projection of the personality of the sufferer," Dr. Harris explained. "The person at the other end of the line is in a position to 'cut off' the voice of the patient as if it were a projection of the body. All the patients who reported this symptom were over-attached to their mothers and were antagonistic and rejecting toward their fathers.

"It is not surprising," Dr. Harris said, "that this form of anxiety is to be found in our time, considering the widespread use of the 'phone in this age of anxiety."

Patients reporting this kind of fear on attempting to use the telephone have emotional disturbances ranging from relatively minor neurotic illness to those bordering on severe mental sickness.

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