

PSYCHIATRY

In Freud's Death World Loses A Pioneer in Science of Mind

Colleagues Liken Father of Psychoanalysis to Copernicus and Newton; Say He Paved Way for Peace

Sigmund Freud died on September 23, an exile near London from his home in Vienna. These evaluations of his work were written by fellow scientists in the United States at the request of Science Service.

By **DR. A. A. BRILL**
Psychiatrist, New York City

WITH the death of Sigmund Freud the world has lost one of its outstanding figures and science one of its most ardent votaries.

Prof. Freud was not merely a pioneer in the mental sciences but the discoverer and developer of a new method of investigation of mental processes. Psychoanalysis is his own creation. Before he came on the scene no one understood the underlying factors of abnormal behavior. Psychiatry was barren and uninteresting. The best achievements of his predecessors were classification and description. They told us nothing concerning the dynamic factors at the bottom of the neuroses and psychoses.

Prof. Freud not only solved the riddles of neurotic symptoms, hallucinations, and delusions but bridged the seemingly long gap between the psychically normal and abnormal, by demonstrating the same mechanisms in dreams, myths, fairytales and totemism.

Through incessant toiling for almost sixty years Freud developed a most rational and most adequate method of study and treatment of mental diseases. Through his concepts one can follow the intricacies of the psyche into normal or abnormal paths of behavior as never before.

In brief, Prof. Freud has rewritten the mental sciences and has given new life to psychology, sociology, anthropology and literature. His theories have encountered strong opposition from the very beginning but most of this has long vanished. For some years the scientific world has recognized the value of his discoveries. His works are read and studied wherever there is any civilization. There are psychoanalytic societies in every part of the globe where his pupils are teaching and promulgating the words of the master.

Prof. Freud died at the ripe age of eighty-three years but the spirit of his work will live forever.

By **DR. WINFRED OVERHOLSER**
Superintendent, St. Elizabeth's Hospital,
Washington, D. C.

THE WORK of Prof. Sigmund Freud in its long range perspective can better be evaluated a century from now than at present. There is every reason to think that one hundred years hence Freud will be classed with Copernicus and Newton as one of the men who opened up new vistas of thought. Certain it is that in our time no man has cast so much light upon the workings of the mind of man as Prof. Freud. Coming upon the scene when psychiatry and psychology were in the descriptive stage of development, Prof. Freud by strokes of genius, a profound philosophy, and scientific clinical investigation discovered the important part played by the unconscious in the mental life, the role of phantasy, of instinct and of emotion. Above all he developed the concept of psychological determinism and placed psychiatry where it properly belongs, among the biological sciences.

For reasons which are clearly understood by everyone familiar with man's vanity, his work for many years encountered tremendous opposition, just as did the enunciations of Galileo long before. This opposition indeed continues in certain circles, and the student of the mind readily appreciates the reasons why only recently Prof. Freud was expelled from his native city. In spite of the opposition, however, Freud's teachings have by their own intrinsic soundness made themselves felt and accepted, so that today no psychiatrist, whether professedly Freudian or not, is able to discuss a case without utilizing some, at least, of the Freudian concepts. It is a great satisfaction to all of the admirers of Freud to know that notwithstanding the early criticism of his work he has been permitted to live to a ripe old age in the full possession of his mental faculties and vigor, and to see the very general

acceptance of his teachings, which once were so severely and unfairly attacked.

By **DR. FRANZ ALEXANDER**
Director, Institute for Psychoanalysis,
Chicago, Ill.

A FINAL evaluation of Freud's contribution will be possible only from the perspective of history. Even the accomplishments of the greatest genius are determined by the spirit of their time, but the earmark of genius is that he gives more to his time than he receives from it. This is true in the case of Freud to the highest degree.

Freud's influence upon psychiatry was as revolutionary as that of Copernicus upon astronomy or as that of Darwin upon biology. He introduced a new principle and method of investigation to serve as the basis of a new discipline.

Psychoanalysis is the first consistent theory of personality and the first causally oriented form of psychotherapy.

Prof. Freud's main accomplishments were: to demonstrate that man's personality, normal or morbid, is shaped by life experiences, that among these experiences early childhood influences are of overwhelming significance. That already in childhood sexual desires and jealousies (oedipus complex) are important factors, and above all, that behind a layer of civilized veneer man harbors in his unconscious mind a nonsocial nucleus with destructive impulses directed against others and himself. He discovered a method by which this nonsocial core of personality can be explored in spite of man's natural tendency to hide it from himself and others.

Freud takes a leading position among those scientists who forced man to replace self-deception and superstition by recognizing the true nature of things: the natural sciences are accomplishing this by exploring the world surrounding

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us, Freud attempted it by exploring the internal world of man himself. In the present confused world man is using his advanced technical knowledge both for self-preservation and destruction. Freud's psychoanalysis, by its deeper knowledge of man's destructive impulses, may be the antidote against one sided technical development which threatens to destroy civilization. It may lead to a more constructive social life in which man, by recognizing it, will control his unconscious destructiveness and use his scientific mastery of nature for mutual help to happiness.

Science News Letter, September 30, 1939

ENGINEERING

Bureau of Standards Has Completed Steam Tables

IMPORTANT jobs you never hear about: Making up long tables of fine print listing thousands of figures, the steam tables familiar in engineer's handbooks based on a long and complex series of determinations of the properties of steam. U. S. Bureau of Standards research just completed covers properties of water and saturated steam from water's freezing point (32°F.) to the critical region where pressure is about 3200 pounds per square inch (705°F.)

What steel strength data is to the bridge builder, steam tables are to engineers who build giant power plants and locomotives. International cooperation, U. S., England, Germany participating, made possible the research, successfully steered by the American Society of Mechanical Engineers.

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reason and scientific knowledge. To keep alive the aims of science in furthering the pursuit of truth in the universe and the relation of that truth to the developments of man's nature, without regard to tribal and racial distinctions, should be, indeed, must be, the ultimate function of the scientific thinker, whatever may be his more immediate preoccupations."

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● RADIO ●

H. S. Fairbank, of the Public Roads Administration, will be the guest scientist on "Adventures in Science" with Watson Davis, director of Science Service, over the coast to coast network of the Columbia Broadcasting System, Monday, October 9, 4:30 p.m., EST, 3:30 CST, 2:30 MST, 1:30 PST. Listen in on your local station. Listen in each Monday.



Bats as Pets

BATS would seem to be about the world's worst bet as possible pets, yet they have been tamed at least to the extent of willingly accepting food from human fingers, reports Dr. Glover Morrill Allen, curator of mammals in the Harvard University museum of comparative zoology, in a new book on bats. (*S.N.L.*, Sept. 23.)

The way to a bat's heart, no less than to a man's, lies over that well-worn threshold, the stomach. Bats are voracious creatures, always hungry, as small and highly active animals usually are. They will struggle and try to bite when first made captive, but if you poke a choice insect tidbit between their gnashing teeth they apparently forget their hostility very quickly. Dr. Allen even tells of one which he pacified by giving drops of water on the end of a lead-pencil while he held the little mammal in his other hand.

Bats are apparently ready for any kind of insect food, even unfamiliar sorts; for after inducing his newly captured pet to slake its thirst, Dr. Allen presented it with a gift of mealworms purchased at a bird store. It is highly unlikely that bats ever encounter mealworms in the course of their ordinary nocturnal hunting; nevertheless this bat evidently liked the taste of the first one offered:

"His jaws closed in a viselike grip, his sharp canines puncturing the plump body of the mealworm as if it were a 'hot-dog'. His whole attitude was one of fierce resistance, with every intent to vent his fury on whatever disturbed his peace. Then, suddenly, as the tasty juice oozed into his mouth, his entire behavior changed. The tense jaw muscles relaxed, his defiant squeaks ceased, and I could sense the working of his mind

as his wrath abated and he began to taste the squirming morsel with rising interest.

"In a few seconds all recollection of his situation seemed to have vanished, while the unfortunate mealworm, chewed over from end to end, was promptly swallowed, and my captive looked up hopefully for more. One after another he chewed down two dozen mealworms, and by now we had established friendly relations."

It is a good thing that bats can be thus quickly tamed, for it never pays to keep them more than a few days in captivity. They are obviously not fitted for a "cage-bird" existence, and will die if kept in too close confinement. Dr. Allen does tell, however, of several instances in which bats come to regard human beings as dependable sources of provender, and would report regularly at-mealtimes.

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VOLCANOLOGY

"Baby" Volcano Nestles At Its Mother's Feet

See Front Cover

A "BABY" volcano which nestles at its mother's feet in Guatemala may become the scene of operations of a new expedition in volcanology to be sent out by Carnegie Institution of Washington early in December.

Towering Santa Maria is the parent volcano and little Santiaguito is the baby. Both are shown on the front cover of this week's SCIENCE NEWS LETTER. The diminutive is used only in a relative sense for Santiaguito rises 1,200 feet off the floor of Santa Maria's old crater which formed in the gigantic eruption of 1902 at the same time that Mt. Pelee was bringing havoc by its eruption in Martinique.

Carnegie Institution scientists, headed by Dr. E. G. Zies, of the Geophysical Laboratory, will study the rock masses slowly being extruded from Santiaguito and analyze the corrosive gases of sulfur dioxide, hydrofluoric acid and sulfuric acid which are found mixed with the steam being liberated.

The new volcano dome has risen rapidly, for it began to form in 1922. It was nearly 1,000 feet high within three years and has been pouring out nearly a constant volume of semi-plastic heated rock ever since. Because its base is constantly growing larger, its increase in height becomes slower each year.

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