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## Fads & **Fallacies** IN THE NAME OF SCIENCE

THE CURIOUS THEORIES OF MODERN PSEUDOSCIENTISTS AND THE STRANGE, AMUSING AND ALARMING CULTS THAT SURROUND THEM. A STUDY IN HUMAN GULLIBILITY

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**PSIGNICS MACHINES** 

FEYING SAUCERS

WIGHTLM REICH

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ATLANTIS

ECCENTRIC SEXUAL THEORIES BAIDEY MURPHY

The modern pseudo-scientist—to return to the point from which we have digressed—stands entirely outside the closely integrated channels through which new ideas are introduced and evaluated. He works in isolation. He does not send his findings to the recognized journals, or if he does, they are rejected for reasons which in the vast majority of cases are excellent. In most cases the crank is not well enough informed to write a paper with even a surface resemblance to a significant study. As a consequence, he finds himself excluded from the journals and societies, and almost universally ignored by the competent workers in his field. In fact, the reputable scientist does not even know of the crank's existence unless his work is given widespread publicity through non-academic channels, or unless the scientist makes a hobby of collecting crank literature. The eccentric is forced, therefore, to tread a lonely way. He speaks before organizations he himself has founded, contributes to journals he himself may edit, and—until recently—publishes books only when he or his followers can raise sufficient funds to have them printed privately.

A second characteristic of the pseudo-scientist, which greatly strengthens his isolation, is a tendency toward paranoia.-' This is a mental condition (to quote a recent textbook) "marked by chronic, systematized, gradually developing delusions, without hallucinations, and with little tendency toward deterioration, remission, or recovery." There is wide disagreement among psychiatrists about the causes of paranoia. Even if this were not so, it obviously is not within the scope of this book to discuss the possible origins of paranoid traits in individual cases. It is easy to understand, however, that a strong sense of personal greatness must be involved whenever a crank stands in solitary, bitter opposition to every recognized authority in his field.

If the self-styled scientist is rationalizing strong religious convictions, as often is the case, his paranoid drives may be reduced to a minimum. The desire to bolster religious beliefs with science can be a powerful motive. For example, in our examination of George McCready Price, the greatest of modern opponents of evolution, we shall see that his devout faith in Seventh Day Adventism is a sufficient explanation for his curious geological views. But even in such cases, an element of paranoia is nearly always present. Otherwise the pseudo-scientist would lack the stamina to fight a vigorous, single-handed battle against such overwhelming odds. If the crank is insincere—interested only in making money, playing a hoax, or both—then obviously paranoia need not enter his make-up. However, very few cases of this sort will be considered.

There are five ways in which the sincere pseudo-scientist's paranoid tendencies are likely to be exhibited.

- (1) He considers himself a genius.
- (2) He regards his colleagues, without exception, as ignorant blockheads. Everyone is out of step except himself. Frequently he insults his opponents by accusing them of stupidity, dishonesty, or other base motives. If they ignore him, he takes this to mean his arguments are unanswerable. If they retaliate in kind, this strengthens his delusion that he is battling scoundrels.

Consider the following quotation: "To me truth is precious.... I should rather be right and stand alone than to run with the multitude and be wrong..... The holding of the views herein set forth has already won for me the scorn and contempt and ridicule of some of my fellowmen. I am

looked upon as being odd, strange, peculiar. ... But truth is truth and though all the world reject it and turn against me, I will cling to truth still."

These sentences are from the preface of a booklet, published in 1931, by Charles Silvester de Ford, of Fairfield, Washington, in which he proves the earth is flat. Sooner or later, almost every pseudo-scientist expresses similar sentiments.

(3) He believes himself unjustly persecuted and discriminated against. The recognized societies refuse to let him lecture. The journals reject his papers and either ignore his books or assign them to "enemies" for review. It is all part of a dastardly plot. It never occurs to the crank that this opposition may be due to error in his work. It springs solely, he is convinced, from blind prejudice on the part of the established hierarchy—the high priests of science who fear to have their orthodoxy overthrown.

Vicious slanders and unprovoked attacks, he usually insists, are constantly being made against him. He likens himself to Bruno, Galileo, Copernicus, Pasteur, and other great men who were unjustly persecuted for their heresies. If he has had no formal training in the field in which he works, he will attribute this persecution to a scientific masonry, unwilling to admit into its inner sanctums anyone who has not gone through the proper initiation rituals. He repeatedly calls your attention to important scientific discoveries made by laymen.

- (4) He has strong compulsions to focus his attacks on the greatest scientists and the best-established theories. When Newton was the outstanding name in physics, eccentric works in that science were violently anti-Newton. Today, with Einstein the father-symbol of authority, a crank theory of physics is likely to attack Einstein in the name of Newton. This same defiance can be seen in a tendency to assert the diametrical opposite of well-established beliefs. Mathematicians prove the angle cannot be trisected. So the crank trisects it. A perpetual motion machine cannot be built. He builds one. There are many eccentric theories in which the "pull" of gravity is replaced by a "push." Germs do not cause disease, some modern cranks insist. Disease produces the germs. Glasses do not help the eyes, said Dr. Bates. They make them worse. In our next chapter we shall learn how Cyrus Teed literally turned the entire cosmos inside-out, compressing it within the confines of a hollow earth, inhabited only on the inside.
- (5) He often has a tendency to write in a complex jargon, in many cases making use of terms and phrases he himself has coined. Schizophrenics sometimes talk in what psychiatrists call "neologisms" —words which have meaning to the patient, but sound like Jabberwocky to everyone else. Many of the classics of crackpot science exhibit a neologistic tendency.