PSYCHIATRY

Psychiatry and Murder

➤ PSYCHIATRISTS are going out of the courtroom. They will appear less and less as contending witnesses and will be held more and more responsible for the treatment and care of the cases that "belong scientifically" to their province.

This is what should and probably will happen in the future, in the opinion of a psychiatrist, Dr. Fredric Wertham of New York, who has himself appeared as a witness in a number of murder trials.

In a new book, THE SHOW OF VIOLENCE (Doubleday), he says that instead of giving "individualistic and therefore evasive explanations for social ills," the psychiatrist "should not shirk his duty to determine the point where individual guilt resolves itself into social responsibility."

"Murder," he says, "grows from negative emotions, from fear and hatred, from anxiety and anger, from frustration and desperation, from jealousy and greed, from humiliation and spite, from repression and resentment."

The way to prevent murder, he says, is to change social conditions and circumstances so that the respect we say we have for human life is put into actual practice. But he does not think we should turn all or most offenders over to psychiatrists and abolish the concepts of responsibility, crime, punishment, and personal guilt. To do that would be not only impractical but harmful. It would "infringe on the safety of society and on the rights of the individual."

From Dr. Wertham's point of view, punishment has three aspects: (1) the protection of society; (2) the re-education of the delinquent; and (3) what his studies have "revealed as a neglected but important factor, the condemnation of the crime." (*See SNL,* May 14, p. 319.)

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AERONAUTICS

Fast Jets for Military

➤ AIRCRAFT flights already made at speeds faster than sound still leave aviation a long way from practical supersonic airplanes ready for military use, John F. Victory, executive secretary of the National Advisory Committee for Aeronautics, declared.

Keeping America first in the air was the theme of his discussion as a guest of Watson Davis, director of Science Service, on Adventures in Science, heard over the Columbia network. He reviewed the scientific research conducted by NACA and others, that has resulted in the present advanced stage in aviation and emphasized the need of further research for planes of tomorrow.

One of the great products of World War II was the simple lightweight, and powerful jet propulsion engine, he said. This was the first revolutionary principle in aviation. It gave the airplane a different form of thrust, whose efficiency was not limited or reduced by the speed of sound. Nevertheless, the maximum speed so far obtained by a practical service plane in level flight is less than 700 miles per hour.

Although jet propulsion has been known for thousands of years, its application to aircraft awaited new materials, developed by metallurgists, that could retain their strength at very high temperatures. Jet engines in various forms open up new vistas in the amount of power that can become available to shove airplanes through the transonic speed range and into the realm of supersonic flight. The rocket-powered X-1, which has already traveled faster than sound, is a good flight-research airplane and not a regular military plane. Its power lasts but for some two to four minutes.

The advent of supersonic flight opens up whole new realms of problems calling for new and expensive research equipment, he stated. At that, the cost of research is but a relatively small premium to pay to insure that the billions of dollars to be spent on aircraft will produce the best possible aircraft, at least superior to those of any other nation.

Among problems to be solved in supersonic flight is the so-called skin friction heating which raises the temperature in the pilot's cabin. The cockpit of a P-80 Shooting Star heats up 50 degrees Fahrenheit warmer than the outside air at 500 miles an hour. At the speed of sound, 760 miles per hour at sea level, it will heat up 100 degrees. At twice the speed of sound it would heat up 400 degrees. Efficient cabin-cooling system is an essential in supersonic planes.

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Words in Science—FAIR-CLEAR

➤ FAIR, in weather predictions, does not mean the same as clear.

The word clear is used when the skies will be cloudless or so nearly cloudless that less than one tenth of their expanse will be covered with clouds and when visibility will be good.

Fair is used when the skies will be either clear or mostly clear—when there will be sunshine by day and the moon or stars will be visible at night. In other words, fair means fairly clear.

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