PSYCHOLOGY-PSYCHIATRY

Mind vs. Hydrogen Bomb

Atomic scientists, government leaders and military men need the aid of psychologists and psychiatrists in assaying the H-Bomb crisis.

By WATSON DAVIS

NOW that the H-bomb has exploded the atomic "cold war" to a new crisis, how about calling in the psychologists and psychiatrists to help the physicists, diplomats and military men?

There is far more to the critical situation than hydrogen, deuterium, plutonium—or aircraft carriers, world-girdling bombers, and guided missiles.

Minds of men, feelings of masses of peoples, customs of the centuries, the lack of information or the misinformation behind and before the iron curtain—these are ingredients of the impending explosion in international relations that can now trigger city-destroying atomic energy.

When we are sick it is but human not to want to see the doctor. The world is sick, with fear, anger, and desperation, but we flex our nuclear muscles to convince ourselves that we are strong, unafraid, and can lick anyone who puts up his atomic fists.

The practitioners who treat sick human minds and feelings are modest people, preoccupied with individual human troubles. Only occasionally are they bold enough to prescribe for the world, for they realize the magnitude of the task and the lack of certainty of a cure for the disease of impending war.

No one in high place in our government is seeking their advice upon what may prove the crisis of civilization. Yet all of us have questions to ask the psychologists and the psychiatrists, especially those who have dealt with lives influenced by the ideas and spirit of the Communist-dominated, dictator-ruled world.

Could a hundred H-bombs devastating Russia or the USA bring peace to the world? Would \$50,000,000,000 (McMahon's proposal) buy immunity to an atomic arms race? Is it hunger in the stomach or the thirst for security that turns peoples toward communism or toward reliance on a dictator? Do cancers of intolerance, prejudice and money greed in our own country infect our ability to achieve world peace? How far can the word of a ruler, like Stalin, be trusted? If the group around Stalin were wiped out, would it change the cold war?

Some of these questions (and everyone can add more) are spot and transitory, while others are basic. The diagnosis of the doctors on some of the symptoms may be indefinite, but they may have mental,

social or political medicine to suggest that may not be available to congressmen, generals and admirals, or cabinet members.

While the war was still on, before the first atomic bomb was exploded, 2,000 psychologists agreeing 99.4% told us about human nature and peace. In the present crisis some basic principles then presented are pertinent:

War can be avoided. War is not born in men, it is built into men.

In planning for permanent peace, the coming generation should be the primary focus of attention.

Racial, national, and group hatreds can, to a considerable degree, be controlled.

Condescension toward "inferior" groups destroys our chance for a lasting peace.

The root-desires of the common people of all lands are the safest guide to framing a peace.

The trend of human relationships is toward ever wider units of collective security.

"Neglect of basic principles may breed new wars," said the psychologists in 1945, "no matter how well-intentioned our political leaders may be."

A lot of atoms have been split in the past five years. There are new ingredients in the international caldron. If such experts take a new look at the situation, something may come of it.

Above all, it must be a careful, unemotional look with the attitude of the research worker and the clinician. Protagonists and minds-made-up will not be effective in any such consultation upon the mentally disturbed world. And the consultation may not come too late.

Science News Letter, February 18, 1950

NUCLEAR PHYSICS-ENGINEERING

For A-Bomb-Proof House, Build To Resist Quake

➤ BUILD your new house or factory to withstand the most violent hurricane or the strongest earthquake and it may stand up under a half-mile distant blast of an old-fashioned fission atomic bomb.

But the government's tentative recommendations on building and bridge construction to resist atomic blasts are admittedly of pre-hydrogen bomb vintage.



HOW SPEEDY THE JUMP?—A time interval meter electrically measures the speed of ski jumper Arthur Devlin, one of America's leading jumpers. The device casts two parallel light beams across the lip of the take off and measures the elapsed time between the break of the two beams by the skier's body. The speed was found to average from 46.4 to 55.1 miles per hour.

What, if anything, will stand up under the H-bomb is a question for the future.

For several years now the Department of Defense and the Atomic Energy Commission have been compiling a handbook on atomic weapons. Part of it is this study on atomic explosion damage. It admits that fixing up old buildings to resist the air blast of an atom bomb is "a much more difficult problem" than building new buildings for safety. Just as earthquake experts do not like cornices and trim that may fall on the heads of passersby, the atomic damage experts suggest the removal of such dangerous decorations.

Reinforced concrete or steel frame buildings are favored, and they should be designed for a horizontal push from the wind blast of 90 pounds per square foot and a push downward of 70 pounds per square foot to protect them from collapse. In case of an atomic explosion there is a sudden inward pressure, then about two seconds later a suction or pressure in the other direction not quite so strong.

Science News Letter, February 18, 1950

nesses can be discarded so easily, then all history would have to be rewritten in the light of later assumptions.

Science News Letter, February 18, 1950

RADIO

February 25, 1950, 3:15 p. m., EST

"Adventures in Science" with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Joseph E. Smadel, Chief, Department of Virus and Rickettsial Diseases, Army Medical Department Research and Graduate School, Army Medical Center, will talk on "Chloromycetin, Conqueror of Disease".

POPULATION

Density of Ancient Mexico

➤ CENTRAL Mexico is now credited with having a greater population density at the time of its conquest by Cortez than the most populous modern American states have today.

A study by two University of California professors indicates that Central Mexico in 1519 had a native population of 11,-000,000. This is in sharp contrast with the 4,000,000 to 4,500,000 estimates of most modern scholars. The population of the area today is about 13,000,000.

Dr. Sherburne F. Cook, professor of physiology, and Dr. Lesley B. Simpson, professor of Spanish, said the average density of population in 1519 for the whole area was about 60 to 70 per square mile. This is about the same population as modern Michigan and Indiana have.

More populous local areas were the Valley of Mexico, the seat of the Indian cultures, which had about three times as many people per square mile as did Rhode Island in 1940. In that year Rhode Island had 674 persons per square mile, the densest population of any of the states. Tlaxcala, a province of about the same size as Rhode Island, had in the sixteenth century about the same density of population as that state had in 1940.

Some of the data come from unpublished Spanish archives which were made available to the two professors. They identified more than 1600 Indian communities of importance existing at the time of the conquest. These communities contained about 90% of the population.

Their figures come from three sources. First, they gathered contemporary clerical data, including baptisms. Second, they used estimates of Cortez and his associates on the sizes of native armies. Third, they selected representative towns for which reliable data were available both for 1519 and 1565, established a ratio between these periods and then applied these ratios to the whole of Central Mexico. The results of all three methods were in good agreement.

The differences between their figures and those of other modern scholars is explained by Drs. Cook and Simpson as follows:

"This violent discrepancy arises from the conviction among most scholars that the ancient observers were not to be trusted -a conviction which we do not share and from their resultant habit of dividing early estimates by some arbitrary factor, ranging from two to five. It seems to us that if the testimony of respectable wit-

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