

New Values for Old

THINKING of the nature of physics leads to thoughts about its relevance. In a world blighted by hunger, strife and injustice should physicists desert their computers and accelerators and take up sociology? Or can they, as physicists, help the world toward harmony?

Surely physicists have a deserved reputation as problem solvers. Men who can explore an atom and bring to operation a nuclear reactor, runs one argument, should be able to understand society and make it work. Their training has sharpened their minds to such precision that no difficulties should be beyond them. Or perhaps they have this unusual power just because the charms of physics attract the best people. Even if physicists are too modest to think this way about themselves, it is unlikely that others will avoid thrusting greatness upon them.

However one pursues it, the argument is dangerous and probably fallacious. No one really knows whether physicists become what they are through selection or training. And the effort to put their capacities to work outside their realm of competence may lead to error by investing their opinions with disproportionate weight. The old family doctor used to dish out half-baked psychiatry because no one around could do it better, but he probably gave a lot of bad advice.

JUST what is wrong with our world we do not know, but we feel it is fundamental, basic, causal. From it must come the contrasts of growing yacht populations and continuing hunger, of idleness and a shortage of skilled workers, of abilities to launch satellites and inability to stop wars. Perhaps the fundamental cause is a lack of new values to replace obsolete ones. Perhaps physics has contributed to such a value vacuum by making old ways of thought look ri-

diculous. Who wants to build campfires in a disappearing wilderness when Batman and astronauts are experimenting with gravity-free existence?

The immutable, inexorable laws of nature have shown us that meteorological conditions, not protective providence, bring the rain that saves the blockhouse from destruction. With realization of this hard fact we have lost the old comforting faith that poetic justice prevails, good is rewarded and evil punished through the intervention of providence. Man's old ideas of order and beauty have withered, and so far science has not made its own esthetic sufficiently appealing to replace them. Boys and girls who have given up building fires out of doors have not taken up the study of pendulums instead.

Here, we think, physics has its opportunity to contribute. A lad or lass who is fascinated in his teens with natural science is, perhaps, less likely to spend his twenties as a wastrel, his thirties as a soldier and his forties as a selfish voter more interested in his next vacation than in the welfare of poor people. But who will inspire the lad and lass and their parents to an interest in science except professional scientists?

MANPOWER and technology, we all know, are available to solve world problems. Neither the physicist nor anyone else knows just how to apply them. Stepping out of his proper role the physicist is quite as likely to do harm as good. But within his role he has ample unfilled opportunity to show the world his values: the order of scientific law, the power of logical thought, the beauty of nature understood. And perhaps from such a demonstration might come new values, new purpose and even new harmony for the world.

—R. Hobart Ellis Jr