

# SCIENCE

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## SCIENCE AND THE STATE OF MIND<sup>1</sup>

By Dr. WESLEY C. MITCHELL

PROFESSOR OF ECONOMICS AT COLUMBIA UNIVERSITY; PRESIDENT OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

YOUR president's invitation to address the American Science Teachers Association both flattered and intimidated me. An economist who has any inkling of what mathematics, astronomy, physics, chemistry and biology in its numerous branches have accomplished is grateful when representatives of these shining disciplines admit him to their company. But he feels that in their company his proper role is that of listener, not of speaker. Your techniques are far more advanced than his, your results are more securely established, you have and you merit higher prestige both in intellectual circles and with the general public. From you an economist should be able to learn much; whether he can make any return in kind is doubtful.

Yet there is a way of conceiving science that rationalizes, and perhaps justifies, both your invitation to speak and my acceptance. Despite the bewildering

specialization of scientific inquiries, it is permissible to think of science as a unit. A physicist may not understand the technical papers of a physiologist, and *vice versa*; but the two workers approach their problems in the same spirit. Both workers seek to unite accurate observation of phenomena with systematic analysis of relations; neither expects that his results will be accepted unless they are confirmed by competent investigators who repeat his experiments and check his reasoning; each realizes that what he observes and what he thinks is influenced by a personal equation, but each tries to keep this factor from warping his conclusions more than is inevitable.

In short, we cherish the ideal that all scientific men are single-minded in their search for truth. We expect them to avoid wishful thinking; that is, they must not alter their findings to suit the non-scientific beliefs or longings or dislikes of others or themselves. All of them are supposedly ready to expose

<sup>1</sup> Address given at the luncheon of the American Science Teachers Association, Richmond, Virginia, December 29.

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