



A Problem for Educators

SCIENTIFIC research is conducted largely behind closed doors, and the accuracy of any man's observations and the veracity of his reports depend ultimately upon his honesty. This honesty depends in turn upon maturity, upon some degree of security, and upon a sense of identification and fellowship with competitors. Under present conditions it is a tribute to scientists that violations of their code of honor are so rare that when lapses occur they become historic scandals. This issue is especially delicate in such fields of science as psychology, psychiatry, and psychoanalysis, in which it is difficult to repeat another man's observations for purposes of objective clinical or experimental or statistical confirmation. Consequently in these disciplines, reports of observations become themselves sources of controversy and suspicion. For many reasons I suspect (although I cannot prove this) that we may be seeing today the birth of a new psychosocial ailment among scientists, one which may not be wholly related to the gangster tradition of dead-end kids.

Are we witnessing the development of a generation of hardened, cynical, amoral, embittered, disillusioned, young scientists? If so, for the present the fashioning of implements of destruction offers a convenient outlet

for their destructive feelings; but the fault will be ours and not theirs if this tendency should increase through the coming years and should find even more disastrous channels of expression.

Certainly the idyllic picture of the innocent, child-like scientist who lives a life of simple, secure, peaceful, dignified contemplation has become an unreal fantasy. Instead, the emotional stresses of his career have increased to a point where only men of exceptional emotional maturity and stability can stand up to them for long, and remain clear-headed and generous-hearted under such psychologically unhygienic conditions. Thoughtful educators are beginning to realize that the socio-economic basis of the life of the scientist must be entirely overhauled; that the psychological setting of his life needs drastic revision; and that at the same time the emotional preparation for a life of research is at least as important as is the intellectual training.—LAWRENCE S. KUBIE, "Some unsolved problems of the scientific career," *Am. Scientist* 42, 112 (1954), an excerpt from a two-part article.

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Education does not mean teaching people what they do not know. It means teaching them to behave as they do not behave. It is not teaching the youth the shapes of letters and the tricks of numbers, and then leaving them to turn their arithmetic to roguery, and their literature to lust. It means, on the contrary, training them into the perfect exercise and kingly continence of their bodies and souls. It is a painful, continual and difficult work to be done by kindness, by watching, by warning, by precept, and by praise, but above all—by example.—JOHN RUSKIN.

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