## INTELLECTUAL INTEGRITY AND THE ART OF THINKING

BY VICTOR S. YARROS

CROCE, the distinguished Italian philosopher, maintains in one of his books that there is no such thing as an intellectual error. The average man has talked for ages of mistakes of the head and mistakes of the heart, but Croce asserts that all mistakes are essentially moral.

This, at first sight, appears to be a wild paradox. Is it not notorious that the most careful, conscientious and truthful men make mistakes? Are not men misled by appearances, by evidence which seems to them sufficient but turns out eventually to have been insufficient? Are not hypotheses and theories revised and re-revised in the light of new facts, and is it not legitimate to form tentative theories? Now, then can Croce take the position he does as to the origin and nature of error?

The answer is that Croce believes, with Prof. Graham Wallas and others, that there is an art of thinking, and that it is one's duty to undergo training and discipline in that art, and to master it, thus avoiding errors.

For example, a man of science observes phenomena and tries to explain them. This means that he has formed a theory. But if he is truly scientific, he will realize and insist that his theory is provisional, tentative, subject to modification or even rejection after further observation and experiment. In that case there is no error. Likewise, when a person is aware of his limitations, his ignorance, he will qualify his statements and remain open-minded. He will say, "I am inclined to believe," not "I believe." He will not claim convictions when he has only notions or opinions based on slender data.

Croce, if I understand him, contends that the avoidance of errors and mistakes is a matter of literary style, and that the true scientist can have no difficulty in expressing himself with precision and caution. Rashness, dogmatism, looseness of statement, vanity, pretence and the like are, of course, moral, not mental, qualities. Hence Croce's conclusion—so odd when not analyzed and correctly interpreted—that error is moral, not intellectual.

This question is raised again by Abbe Ernest Dinmet, the French critic and teacher, in his little book on *The Art of Thinking*. His conclusions are not different from those of Graham Wallas, but he is less direct, less exact, less didactic. He is interested, he says, in producing thought, not in guiding it. Wallas was interested in improving the quality of much current thought. Both agree that the obstacles to real thinking are many, and the wonder is that we manage to think as well as we do. But who would dispute the proposition that, if it be possible to produce better thought and more thought of the right kind, it is our duty to employ whatever means are available for the promotion of that end?

For, as M. Dinnet says, the question is at bottom a moral one-namely, the making of the fullest and worthiest use of all our faculties. The question is individual, primarily, but it is also social. Waste of power and faculty is reprehensible, and the victims of such waste are often the victims of social maladjustment, bad educational methods, group blunders and false standards. If schools and colleges do not teach the art of thinking, they neglect their primary and most important purpose. Facts are only the raw material of thought, and obviously to interpret them aright, to arrive at hypotheses and theories, or at laws, thinking is necessary.

How, then, can we teach thinking? Wallas divided the process of thought into four distinct stages, and stressed the importance of adequate preparation, of time for incubation and the proper utilization of illumination. M. Dimnet passes over this suggestive division and deals more generally with the problem.

He first points out the obstacles to thought—Wallas would say to correct and sound thinking. What are they? Dimnet gives quite a list of obstacles—passion, to begin with, naturally, which is another name for bias or prejudice, and then imitation, gregariousness, indolence, wrong ideas of education, lack of leisure or of time for reflection and the cultivation of the pleasures of the intellect.

Can these obstacles be avoided? Not entirely, perhaps, but most of those who are endowed with the capacity for thought—with brains, in short—and with a certain amount of intellectual integrity

and seriousness can avoid most of the obstacles under ordinary circumstances by observing certain conditions and eliminating other conditions.

What must we do to enable our minds to think correctly? I confess I am not entirely satisfied with the way in which M. Dimnet answers the question. He omits vital elements and is rather vague in his answer, though all that he says is true and helpful.

Those who would teach men to think and to avoid error should lay particular stress on the duty of fitting one's-self to form an opinion on a given subject. What value is there in an opinion based on no facts, no knowledge? And how can there be much value in an opinion based on very little and ill-assimilated knowledge? The trouble with most men, especially in the realm of the inexact sciences, is that they form and express opinions without half the knowledge that would give them the *right* to opinions, and that they refuse to modify their notions even if the evidence against them is overwhelming. Further, the trouble with most men is that they are too vain and proud to be intellectually honest. He who would reason scientifically must be humble, ready to change his mind, or to suspend judgment, or to consider with sympathy the arguments of opponents.

But to return to M. Dimnet. What are his conditions of thought? He names and discusses several. He emphasizes the trustworthiness of intuitions, of flashes, of inspirations, agreeing in this with Bergson. He advises leisurely contemplation. He insists on the reading of the best books and on living with the great and their noble and elevated ideas. He urges cultivation of one's own vein, after determining what that vein is. He deprecates the tendency to rush into print. He believes, as does Wallas in incubation and illumination after due preparation, and also in verification.

Since the little book is distinctly literary, rhetorical and conversational, it has the defects of its good qualities—it is occasionally superficial and paradoxical. But these faults may be passed over. It is bound to stimulate thought and direct attention to the sources of error, the vices of intolerant and dogmatic writers, the bad habits of the generality of men who regard themselves as civilized and superior, and the road to truth and high-minded thinking.

The Wallas and Dimnet books should be studied in every high school, college, university and institute of the world. They are more valuable than text-books on logic, or, rather, they are excellent text-books on logic among other things.