

## *The Knower and the Known*

**The Identity of Man**, by Jacob Bronowski, *Garden City, N. Y.: The Natural History Press, 1971. (Revised edition: paper) xii + 145 pp. \$1.45.*

IF THERE ARE any savants still alive and flourishing in our age of specialization, then Jacob Bronowski must be numbered among their select membership. The same might be said of Arthur Koestler. Like Koestler, Bronowski has shown that a marriage between science and the fine arts is not only possible, but can even be happy. Bronowski's training is in mathematics, but he is also a poet, dramatist, and literary critic. He writes about science and mathematics from the point of view of one with first hand acquaintance coupled with an awareness of their purpose and significance in a prose style that is eminently readable.

*The Identity of Man* is a treatise in the form of five essays, the final essay of which has been super-added to the previous four and is, apparently, the reason for this new edition. These are all essays in epistemology, Bronowski tells us. But epistemology is merely the avenue the author follows to arrive at a metaphysics of man. In his epistemology Bronowski distinguishes between two principle "modes" of knowledge: knowledge of the world as yielded by the sciences, and knowledge of the self as yielded by the fine arts and literature. The distinction will be familiar to those who have read the phenomenologists and, indeed, while there are important differences, Bronowski would be at home in the *Lebenswelt*, and shares with Heidegger, for example, an appreciation of poetry as a legitimate source of knowledge. But while Heidegger would regard poetry as a source of data for philosophy, Bronowski considers it to be self-contained. What is of primary importance for Bronowski is that poetry, and art in general, is a distinctly *human* activity, resulting as it does in self-knowledge. As such it constitutes an important supplement to scientific knowledge, and it is self-knowledge that Bronowski is primarily interested in in these essays. His discussion has some unusual features, one of which is worthy of special mention.

Ever since Descartes drove what seemed to be a devastating wedge between mind and body and Hobbes formulated a compelling mechanistic hypothesis that seemed to explain human activity in terms of mechanical laws, the mechanistic hypothesis has appealed to increasing numbers of philosophers and psychologists as a solution to the Cartesian dualism. Bronowski disagrees, and in doing so takes the battle into the enemy camp, as it were, by denying mechanism on the grounds not that we know enough about man these days to avoid this sort of reduction, but that we know enough about *machines* to know that "we cannot now conceive of any kind of law or machine which could formalize the total modes of human knowledge." Most

problematic for the mechanist, claims our author, is self-knowledge as yielded by the artist, poet and novelist. This sort of knowledge is incapable of being "formalized" and is thus essentially non-mechanical—or is so given the present limits of our knowledge.

Bronowski's argument generally turns on the similarities and dissimilarities between self-knowledge and knowledge in the sciences. He sees the activity of the scientist and the artist as essentially the same, and he characterizes this activity by his use of the term "imaginative." This is a theme he has pursued elsewhere, and the author has a compelling way of sharpening the differences between art and science by stressing their underlying similarities. That is, by emphasizing the fundamental unity of the activity of knowing in science and art, Bronowski can at the same time point out important differences—thereby increasing the reader's understanding of both. For example, while knowledge is described as "a rearrangement of experience, in which we put together those experiences that seem to us to belong together and put them apart from those that do not," art, unlike science, does not lead to action. Indeed, art "requires a suspension of the sense of judgment" in which "the imagination explores the alternatives of human action without ever deciding on one rather than another. And in this happy indecision, and only in this, the work of art is different from the work of science." But, we may well ask, how does this help us to understand the identity of man? Because, we are told, "the self is a process in which all his experiences, of the body and the mind, are fixed as knowledge. What makes man unique is the nature of his knowledge. . . ." Consequently, by examining the ways in which a man knows we can learn more about the nature of the knower. This is especially true in the case of self-knowledge. But we must be careful not to ignore scientific knowledge. The two "are inseparable halves of the identity of man . . . two modes of knowledge which are complementary and

which necessarily flourish or wither together." Bronowski proposes that we discover the identity of man by examining both the fruits of his knowledge and the activity of knowing.

It is tempting to be pedantic and fault Bronowski on specific technical points. For example, he does not always make it clear whether he is discussing the activity of knowing or the results of that activity. In addition, his argument generally attempts to persuade by repetition rather than by elaboration. But pedantry is out of place in this case. There is much to learn here, and what these essays lose in the way of technical excellence they gain from their scope and vision which result in the enrichment of the reader's own perspective. These essays are interesting and provocative reading and are worth the respectful attention of professional philosophers and laymen alike.

Reviewed by HUGH MERCER CURTLER