Book Reviews

Aldous Huxley on the Two Cultures

Literature and Science. Aldous Huxley. Harper and Row, New York, 1963. viii + 118 pp. $3.50.

As these words go to press, news comes of the death of Aldous Huxley. The event tempts one to reminiscent eulogy, for in his wide-ranging output he embodies a large part of the concerns of the quarter century from the end of the first world war to the end of the second. But this is not the place to detail his accomplishment. Rather, one can let his last-published essay, *Literature and Science*, serve as a résumé in miniature for a good part of what might be called Huxley's cultural philosophy.

To begin with, the essay is full of quotations from the poets and prose writers, and as usual with Huxley these verses and sentences are exquisitely chosen and placed. It is a delight to read a modern author—modern after Montaigne—who knows how to quote. Then, too, the essay springs from a current concern, in this instance the regrettable Snow-Leavis controversy and the too successful cliché about the two cultures. Huxley wants to be more concrete than the contestants and commentators and to arrive, not at a reconciliation between literature and science, but at a demonstration of their unity in diversity. In a word that unity lies in the subject matter: one world, observed with equal care by two types of intellect which travel in different directions. The literary dwells on private experience, the scientific strives on the contrary to translate all its observations into publicly acknowledged facts and forms.

This doctrine is engagingly developed thanks to a pellucid prose and fit quotations, as I have said, and most temperate readers will be glad that a fair mind has hewn for them a middle way through the jungle of conflicting partisan assertions. Yet even a temperate reader may feel a doubt, frequently repeated, about the possibility of staying on this comfortable path. The use, for example, of Mallarmé's poetry as a chief instance of what "literature" characteristically does, is out of scale with the idea that art takes the whole world as its province, like science, and delivers its own kind of truth about it. Mallarmé's use of language was very special, and it treated by deliberate rejection or refinement a gross reality which earlier poets had managed to take in. The result is that both the poetry and the experience are in the strict sense minute.

Huxley, it is true, deals with Dante and Donne, but he is unhappy about their use or misuse of the scientific knowledge of their day. He also chides Hopkins for using an "outworn imagery" that disregards what the 19th century found out about the universe, and he is contemptuous of Shaw for his views on Darwinism. In this encounter it is Huxley who is the faulty historian of science, not Shaw. And the clue to Huxley's increasing dissatisfaction with writers as the essay goes on is that he evidently expects them to adopt (or if need be, fashion) for their poems and fictions an imagery derived from science.

The more one thinks about this requirement in the light of the opening distinction the stranger it seems. The poet certainly can not be asked to study science so as to use its terms with precision. But if he is imprecise, say by using a popularized technicality, he is at once pretentious and false to the ideal of his craft, which is precision of expression par excellence. I am willing to suppose that Huxley did not really mean what he implied about this duty of the poet, but rather something else which is—alas—still worse. I refer to the explicit example of the nightingale, given toward the end of the essay. According to this, Keats is all wrong: the bird is not pouring forth its soul in ecstasy, for *now we know* that *all it is doing* is serving notice on its fellows that it claims a certain territory for worm-grubbing.

That Huxley should succumb to this old fallacy that the putative cause of an action is its sole motive and full representation makes one sad. On his showing about Philomel one could say with equal plausibility that man sings for his supper: Chopin at the house of the Comtesse d'Agoult played as he did because of her excellent dinners, just as poets write love poems because of a mounting pressure on certain glands. The astonishing thing is that Huxley skirts self-criticism in the same passage, when he writes: "Man is the measure of all things. How true—for us!" His failure is in not seeing that in literature (as against science) the assumption that there is another measure is quite false. We can study birds, necessarily from outside, till kingdom come, we shall never know *why* they sing. But as poets we know—none better—how their singing affects us. And as to this datum science has not a word to say; it can only listen too.

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Physical Chemistry

Magnetism and the Chemical Bond. John B. Goodenough. Interscience (Wiley), New York, 1963. xvi + 394 pp. Illus. $12.50.

This is a remarkable book, collecting as it does so many topics related to the electronic structure of solids and discussing their known electric and magnetic properties in terms of semiempirical quantum mechanical theories of electronic interactions. It will be of value to physical chemists and chemical physicists interested in the solid state. In the early pages, the author succinctly reviews the theoretical framework that is later used. This may be the most difficult part for chemists, but it is amply supplied with references to the original literature as is the rest of the volume. Very little background knowledge is required, for all the material is developed or summarized for the nonexpert who is willing to make some effort.

After introducing the free atom, the author discusses the consequences of