Aldous Huxley: The Late Author Felt Scientists Tend To Search for Truth, Ignore Consequences

The title of the last new book by Aldous Huxley to be published before his recent death, *Literature and Science*, struck a fitting final note for a writer who was a member of one of the most remarkable dynasties of talent the English middle class has produced.

Aldous Huxley's grandfather was Thomas Henry Huxley, Darwin's colleague and champion; his brother is Julian Huxley, a well-known biologist and public figure and first directorgeneral of UNESCO; his half-brother is Andrew Fielding Huxley, who shared this year's Nobel prize in physiology and medicine. Aldous Huxley's father was Leonard Huxley, editor of the *Cornhill Magazine*, an influential English review, and his mother was a niece of Matthew Arnold, the eminent Victorian poet, critic, and inspector of schools.

While Aldous Huxley was regarded by many as a man in advance of his times, he also had some of the marks and qualities of the Victorian notable. He triumphed over physical disability to pursue a long and productive career. As a writer he was not only industrious but versatile and produced some half a hundred volumes-novels, essays and belles lettres, verse, biography, poetry, drama, and travel books -as well as incidental and uncollected journalism. He resembled the Victorians also in his moral earnestness, though doubtless they would have been shocked by his premises and conclusions.

Because he died on the day after President Kennedy's assassination, Huxley's passing was not followed by the ritual of reconsideration which ordinarily accompanies the death of a litwrary figure of his prominence. For the time being, however, it is safe to say that he is assured a special niche as the author of *Brave New World*, a novel dealing with a scientific dictatorship in the 26th century.

Aldous Huxley might have followed the family bent for biology except for the accident of eye disease in his youth, which barred him from laboratory work and prevented him from studying medicine as his illustrious grandfather had done. Huxley studied biology at Eton, but when he was able to return to Oxford, it was to read English literature in an Oxford caught in the empty interregnum of World War I.

13 DECEMBER 1963

Huxley missed his generation's education in the trenches, but as a young poet, journalist, and novelist in London he contributed to the literature of disillusionment which dominated the early postwar years. With his grounding in science, Huxley saw the war as confirming and completing the destruction of old values and morals which the 19th-century upheaval in science had begun. In early work, like the comic novel *Antic Hay*, he drew a picture of a society in which bright but frivolous or vicious people lived frenetic but meaningless lives.

By the mid-twenties, however, Huxley was asking the philosopher's question of how men should live. In the novel These Barren Leaves (1926), the central figure withdraws to a life of meditation, and Huxley, for the rest of his life, remained deeply interested in the way of the mystics, especially the mystics of the East. While Huxley's innate skepticism kept him from giving full allegiance to Yoga or Zen, there is little question that he prized the ideal of what he called in the 1930's "the non-attached man"-non-attached, that is, to pleasure, power, or some limited end such as science.

Anti-Utopian Novel

From the late 1930's on, Huxley made his home in California, where he found others attracted to the ideas and disciplines of Oriental philosophy and religion, and where he also pursued his interest in the effect on human consciousness and perception of such drugs as mescaline and LSD-25.

Huxley started out casting his novels in the form of discussions among highly articulate characters. Later on they became more and more discussions in the form of novels.

His learning was encyclopedic and exotic, and he seems to have used it all, from Architecture to Zuni, at some time or other. But it was the biological aspects of human existence which continued to absorb him. And it was his knowledge of biology which raised his 1931 novel *Brave New World* above science fiction to the level of, as he called it, a prophetic fable.

Brave New World was among the first authentic anti-Utopian novels, though H. G. Wells had more than hinted that scientific progress might not be the unalloyed blessing that the 18thand 19th-century optimists viewed it as being.

In Huxley's 26th century, humans inhabit a world state in which both heredity and conditioning are controlled. A bargain has been made for mankind to relinquish freedom for social stability and permanent peace.

Inequality is enthroned as a social good, and the controlled production of babies in laboratories by ectogenesis perpetuates an inflexible caste system.

Huxley's forecast may have looked like nightmare fantasies when the novel was published, but Hitlerite Germany and Stalinist Russia demonstrated what the thoroughgoing application of modern technology to a totalitarian society can achieve. Mass propaganda through modern communications, the reinforcement of approved behavior by indoctrination of the young, thought control, brainwashing, the removal of undesirables and unreliables from the society, —all these seemed to confirm Huxley.

In commenting on all this in a book of essays titled *Brave New World Revisited*, published in 1958, Huxley admitted surprise at the speed at which so large a part of his prophecy had been realized.

Happiness the Spur

He noted that his society of the future had solved the problems of overpopulation and technological unemployment which are pressing in on humans living today. And he observed that Soma, the "euphoric, narcotic pleasantly hallucinant" drug which is the opium of the people in *Brave New World*, has its forerunners now in the tranquilizers, pep pills, and hallucinogenic drugs which we consume in increasing quantities.

Huxley himself pointed out that his older novel is perhaps a more accurate long-range forecast than George Orwell's post-World War II novel 1984. Orwell's stark, post-nuclear war dictatorship is based on fear, while Huxley's is based on happiness, scientifically engineered and perpetuated.

Huxley's view of the scientist was equivocal. He was an intellectual who obviously prized intelligence and the exercise of reason, but he seems to have felt that the typical scientist develops his intellect at the expense of other attributes. He suggests that scientific progress has been made at a cost to society of humane qualities such as individuality and independence, charity, and those capacities that can be summed up under the word sensibility.

Huxley was sternly and perhaps unfairly critical of scientists, probably because he expected more from them than from others. He censures them harshly for not accepting full responsibility for the effects on society of their work. And his tone when speaking of scientists was often reproachful, as it is in this excerpt from his 1937 book of essays, *Ends and Means*.

"In our institutions of higher learning about ten times as much is spent on the natural sciences as on the sciences of man. All our efforts are directed, as usual, to producing improved means to unimproved ends. Meanwhile intensive specialization tends to reduce each branch of science to a condition almost approaching meaninglessness. There are many men of science who are actually proud of this state of things. Specialized meaninglessness has come to be regarded, in certain circles, as a kind of hall-mark of true science. Those who attempt to relate the small particular results of specialization with human life as a whole and its relation to the universe at large are accused of being bad scientists, charlatans, selfadvertisers. The people who make such accusations do so, of course, because they do not wish to take any responsibility for anything, but merely to retire to their cloistered laboratories, and there amuse themselves by performing delightfully interesting researches. Science and art are only too often a superior kind of dope, possessing this advantage over booze and morphia: that they can be indulged in with a good conscience and with the conviction that, in the process of indulging, one is leading the 'higher life.' Up to a point, of course, this is true. The life of the scientist or the artist is a higher life. Unfortunately, when led in an irresponsible, one-sided way, the higher life is probably more harmful for the individual than the lower life of the average sensual man and certainly, in the case of the scientist, much worse for society at large." -JOHN WALSH

Congress: Hearings on Science Advisory Staff Reveals Interest, but No Strong Inside Demand

Without much fanfare or notice in the daily press, a subcommittee of the House Administration Committee last week held a morning hearing on proposals to give Congress its own science advisory staff.

The House Administration Committee handles housekeeping, staffing, and budget matters related to the operation of the House which are mundane in the larger legislative sense but are close to the hearts of congressmen. The science advisory hearing was held before the subcommittee on accounts, whose chairman, Representative Samuel N. Friedel, a Maryland Democrat, displayed a measure of unpartisan magnanimity in scheduling the hearing, since both proposals before the committee were introduced by members of the Republican minority.

Under consideration were two bills, different in detail but similar in general provisions—H.R. 6866, sponsored by Representative Abner W. Sibal of Connecticut (*Science*, 21 June), and H.R. 8066, by Representative William B. Widnall of New Jersey. The Widnall bill is a companion measure to one introduced in the Senate by Senator E. L. Bartlett (D-Alaska), who has been perhaps the most insistent advocate of better scientific advice for Congress.

All the witnesses who appeared at the hearings last Wednesday expressed approval of the idea, in varying degrees. Representatives of three associations of professional engineers declared themselves generally in favor, and the witness for the American Psychological Association endorsed the proposal but argued that psychologists should be included among the science advisers.

The witness who went furthest in arguing that defects in the present federal science establishment make science advisory apparatus for Congress essential was John Heller, executive director of the New England Institute for Medical Research, located in Sibal's district. At the hearings Heller demonstrated that he had spent time and effort reviewing federal research agency reports and talking to scientists and administrators involved in research for the government, and also that he is a man with active capacity for feeling outrage. Heller said that while some federal agencies are doing excellent work, others, conspicuously, are not. He cited government literature in which agencies falsely claimed credit for specific pieces of fruitful research, and charged that some agencies are using research not necessarily connected with their missions to build budgets and bureaucratic empires. Heller has had experience as a recipient of federal grants and as an agency consultant, and he gave advice on science to Richard M. Nixon during the last presidential campaign.

Heller did not speak from a prepared statement but said he would submit documentation for his remarks, to be included in the record of the hearing. Friedel announced that the record will be kept open for 2 weeks to permit other interested persons to submit statements. The hearings should be in print and available fairly soon afterward.

Inside Congress, the feeling seems to be spreading that Congress faces two major problems in dealing with science: (i) the present dependence by Congress on the executive branch undermines the legislative branch's constitutional responsibility to exercise judgment independent of the Executive, and (ii) authority for science is scattered over so many committees that it is virtually impossible to develop balanced and coherent scientific programs in many vital fields.

The practical difficulties implied in the operation of a Congressional Office of Science and Technology (COST) such as the Bartlett-Widnall bill suggests were barely intimated in the singlemorning session. How a congressional science advisory apparatus can be meshed with the committee structure and where to draw the line between Congress and the Executive on the making of science policy are two posers.

There is unquestionably an upsurge in concern over science in Congress, but at present it is taking an investigatory form.

The hour for action on proposals for a science advisory staff will likely be most propitious when results are in on studies such as that being carried out by the Elliott Committee (see page 1443) and when and if Congress can bring itself to modify its rules and structure.—J.W.

Kennedy's Assassination: Study Organized by Social Scientists

The day after the assassination of President Kennedy, a group of social scientists met informally in Washington to organize a study of how Americans were reacting to the terrible event. The assassination, it was felt, fits into a category of events known to the social psychologists and psychiatrists, as well as to the rest of us, as "disasters"—fires, floods, tornadoes, wars. Study of it, according to one spokesman, could "add to the tradition