

Devaluing the Human Brain

wise for others, and that in my conduct I must concede this. If my faculties compete for the right to fulfillment, it is reason that must settle the case in the light of my interest as a whole. If men or nations compete for the right to realization, reason must settle that too in the light of the good of society generally.

To those who work in philosophy all this will have a familiar sound. It awakes echoes of that classic ethics of self-realization that was taught at Oxford at the turn of the century, and particularly of that noble book by Green on "The Principles of Political Obligation," which remains in the reviewer's opinion the best book in English on political philosophy. This ethics had long roots that ran down into the subsoil of a profound metaphysic. The idealists believed that if men ought to be rational, it was in the end because, by being so, they could partake more fully in the life of the Absolute, which itself was wholly rational. Now Mr. Beer's theory has exactly the same sort of roots. But this time the subsoil is not Green and Bradley, but Whitehead. In two or three gallant chapters Mr. Beer tries to sketch the universe Whitehead lived in and to show that all advance in personal or political ethics must lie in more perfect adjustment to the sort of order it embodies.

Mr. Beer gives reasons for preferring the rationalism of Whitehead to that of the great idealists. These reasons are not, I think, quite convincing. Whitehead is of course more up to date; he knew his science as few philosophers have ever done; and to know one's science is in these days essential if any thinker is to hold respect. But not only is his terminology dreadful; his metaphysics is obscure beyond redemption even by Mr. Beer's able efforts; and he never worked out its ethical implications with anything like the clearness of the earlier rationalists. Mr. Beer could be followed more easily if he had himself followed a less murky light. Still, the main thesis of his book seems to me thoroughly sound, and the way in which he has worked it out reveals an unusual strength of intellectual grip. Indeed, it is a heartening sight to see a young political scientist striking down in this determined way to bedrock for the foundations of his political theory. Later work from his pen will certainly bear expectant watching.

Brand Blanshard, chairman of the department of philosophy at Yale University, is author of "The Nature of Thought" and co-author of "American Philosophy in Education."

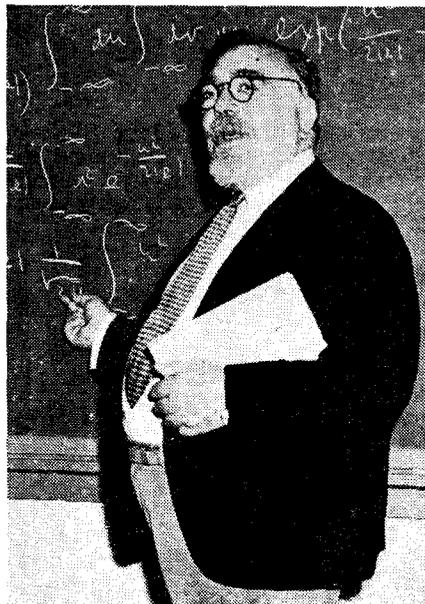
CYBERNETICS: Or Control and Communication in the Animal and the Machine. By Norbert Wiener. New York: John Wiley & Sons. 1948. 194 pp. \$3.

Reviewed by JOHN B. THURSTON

IT appears impossible for anyone seriously interested in our civilization to ignore this book. It is a "must" book for those in every branch of science—engineers (all kinds), mathematicians, physiologists, psychologists, sociologists, anthropologists, philosophers, psychiatrists, chemists (all kinds), psychopathologists, neuroanatomists, neurophysiologists, etc. In addition, economists, politicians, statesmen, and businessmen cannot afford to overlook cybernetics and its tremendous, even terrifying, implications.

"Cybernetics" is the name given to the entire field of control and communication theory, whether in the machine or in the animal. It is derived from a Greek word meaning "steersmen." The name, coined in 1947, is as new as the science which, in 1943, had been "fairly born." But the environment of war and its concomitant and importunate need for mechanical computing machines, which led to the appropriation of large Federal funds for extensive research in this field, was just right to promote the rapid and spectacular growth of this infant. Today this lusty young science demands the most serious attention.

In the words of Professor Wiener, author of this exciting book, cybernetics "has unbounded possibilities



Norbert Wiener: "Cybernetics has unbounded possibilities for good and for evil."

for good and for evil. . . . The first industrial revolution . . . was the devaluation of the human arm by the competition of machinery. . . . The modern industrial revolution is similarly bound to devalue the human brain at least in its simpler and more routine decisions. . . . Taking the second revolution as accomplished, the average human being of mediocre attainments or less has nothing to sell that it is worth anyone's money to buy."

Professor Wiener calls this "a preliminary book" on the subject of cybernetics. It is a beautifully written book, lucid, direct, and, despite its complexity, as readable by the layman as the trained scientist, if the former is willing to forego attempts to understand mathematical formulas.

One-fifth of the book is devoted to an introduction which explains the birth and development of cybernetics. These pages alone are worth the price of the book. It explains how, a decade ago, a group of young scientists at the Harvard Medical School began a series of monthly meetings on scientific methods which were later enlarged to include other scientists and how these led to the birth and development of cybernetics. The belief was held "that the most fruitful areas for the growth of the sciences were those which had been neglected as a no-man's land between the established fields." Cybernetics invades that no-man's land and unites engineers, physiologists, mathematicians, and other scientists in the development of the theories of control and communications in the animal and the machine and in the practical application thereof.

The chapter on "Cybernetics and Psychopathology" cannot fail to interest almost everybody. It shows that the same things which cause humans to go insane bring about insanity in the mechanical minds of the computing machines. Techniques similar to prefrontal lobotomy and shock treatment used to "cure" human minds are effective with berserk machine minds.

The wholly automatic factory can be developed with the expenditure of no more engineering effort than went into the development of radar in World War II. "It is unquestionably possible to construct a machine that will play chess . . . [just as well as] the vast majority of the human race."

The artificial brains described by Professor Wiener are startling machines. They accept information and instructions and act upon them. They can even gather information as bases

for decisions. They perform more reliably, accurately, and quickly than human brains. They can remember for short and long periods of time. They can make decisions.

Wiener takes a dim view of the effects of cybernetics on our civilization:

We [the cyberneticists] have contributed to the initiation of a new science . . . which embraces technical developments with great possibilities for good and for evil. We can only hand it over to the world that exists about us. . . . We do not even have the choice of sup-

pressing these new technical developments. They belong to the age, and the most any of us can do by suppression is to put the development of the subject into the hands of the most irresponsible and most venal of our engineers. The best we can do is to see that a large public understands the trend and the bearing of the present work, and to confine our personal efforts to these fields, such as physiology and psychology, most remote from war and exploitation.

John B. Thurston is a management consultant associated with Wallace Clark & Co.

No Garden City Dream

CONCERNING TOWN PLANNING.

By Le Corbusier. New Haven: Yale University Press. 1948. 127 pp. \$2.75.

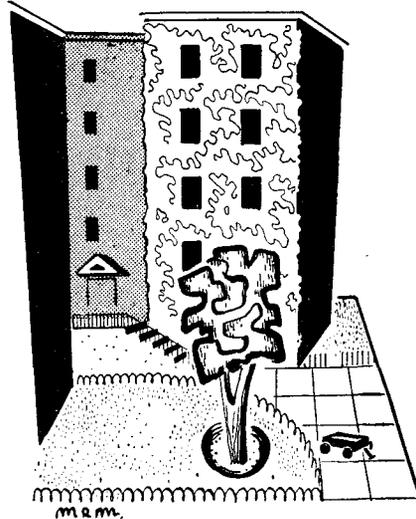
Reviewed by CARL FEISS

The existence of a [single] family house stands today upon foundations which in a large measure no longer exist. . . . This so-called family house will never merit its title, but will drag society into the universal wasteland of garden cities. Universal, for the crisis is worldwide.

THIS statement (while I risk the accusation of grabbing out of context) reveals one of Corbu's attitudes so contrary to the American credo of "Home Sweet Home" and one of his more startling attacks on the Ebenezer-Howard, Raymond Unwin, Lewis Mumford Garden City Dream.

This book is a curious rehash of old ideas which have always been stimulating and new ideas which Corbu's mind seems to be continually germinating. Many readers have been and will continue to be annoyed by a style which is both egotistical and sometimes offensively on the defensive. Corbu is still whipping the academics, a sadistic pleasure in which he has indulged for many years without realizing that he himself is becoming somewhat of an academy. Since a large part of the world has conceded the fact that Corbu is one of its leading architects, and his influence has spread widely during the past ten or fifteen years, he cannot be held to blame for the fact that his disciples look to his works as rigidly as the disciples of Palladio and Mansart look to theirs.

His book is definitely French and nationalistic in its tone. A reader who had not been in Paris would find the first part most difficult to understand. This is partly due to the local character of the discussion, plus the rather scattered and incoherent statements based on a series of impetuous



and staccato phrases which have always been characteristic of Corbu's style. Part of the problem is that he always suffers through translation. His French is exceedingly vivid and he uses many words which, because of their idiomatic character, cannot be easily translated. The translator of any of his books labors under the difficulty of attempting to maintain a style type, while at the same time achieving a clear expression of a highly individualistic series of attitudes.

I have always considered Corbu's sketches as expressive for architecture as are Thurber's for social satire. For the layman, I should imagine that their legibility is questionable. For the initiate in architecture, they remain both expressive and charming. This book has the very unusual format of sketch illustrations opposite every page of text, illustrations which are carefully referred to and competently documented. For a newcomer to the philosophy of Corbu, "Concerning Town Planning" will be stimulating, and I believe will challenge the reader to a further investigation of his thought. To those who are familiar with his previous works, there will be very little found in this either new in

theory or in esthetic. His attacks on the humdrum quality of British Garden City principles and his stressings of the capacity of society today to solve most of its problems mechanically are ideas which provide much room for debate and are certainly a healthy stimulus. To the newcomer to his thoughts, Corbu's romantic free flow of buildings and highways, independent of landscape and topography, comes as a startling contrast to some of the thoughts and works of Frank Lloyd Wright, as well as to the standard landscape schools.

A word must be given here as to one curious character of the book's development. The major part of the work is devoted to seventeen questions about architecture and city planning. The first three or four questions are directed specifically to destroyed towns and villages in France, until Corbu gradually broadens his questions to encompass regionalism in architecture and planning. The questions themselves, being both asked by him and answered by him, develop a sententious quality which is both provocative and annoying. There is also a very unnecessary and continuing "I told you so" attitude. Corbusier does not have to pat himself on the back, nor does he have to refer to his early works as continually as he does.

Perhaps the most worth-while thing about his book from the standpoint of the American reader is its attack on the accepted Anglo-Saxon methods of thinking about the community. This is not a personalized attack; rather it is directed at ideas. Curiously enough, many of the weapons used were fabricated in the Anglo-Saxon world and are adroitly directed against some of our most hide-bound ideas.

The book's worst qualities are its smugness and hollow oracular ringing of the bells of both truths and half-truths. The result is that it is neither a great book, nor a particularly good one. We will probably have to depend upon one of Corbu's disciples to winnow from all of his writings the great ideas which he has propounded. This will come at a later date. In the meantime, it is well worth a reader's while to encounter the personality of the man and to study both the text and illustrations of this little book. He will have fun with many of the ideas if he, after accepting the author's personality, is still willing to consider them. Corbu, like many individuals shouting in a world of conformists, is his own most difficult problem.

Carl Feiss is director of the School of Architecture and Planning of the University of Denver.