

ideologies, and the rest of the "superstructure," they said. They found it necessary to admit that aspects of the "superstructure" may affect productive relations; there is action and there is reaction between what is on the bottom and what is on the top; but "in the long run" or "fundamentally" productive relations explain everything.

Why did Mr. Chew need to take on the burden of a monistic explanation of wars? Had he read several chapters of Professor Morris R. Cohen's "The Meaning of Human History," he would have seen that there is no philosophical need of a monistic hypothesis, nor is it possible to prove the truth of such a hypothesis.

While Mr. Chew fails to prove the theory that wars are caused by desire to acquire farm lands, his book does succeed in showing the need for a world balance between farms and factories. His facts and figures are dramatic and his analysis and arguments are clear and cogent.

How can reciprocity or balance between industry and agriculture be established? Mr. Chew suggests that a peace program calls for inducing agricultural countries not to hurry their industrial development, and thus, through self-restraint, avoid aggravating the fears and worries of the highly-industrialized "food deficit" countries. The agricultural countries should confine their own industrialization to agricultural processing, servicing, and transport. This would permit them to do a thriving agricultural trade, and at the same time the fears of hunger in industrialized countries would be allayed.

Few books published in the last few years make the need for a One World structure more patent than does this book by Mr. Chew. He describes the economic problem fairly enough, but his failure to consider the possibility of a political resolution of an economic difficulty sharply limits the value of his book.



Ideas and Studies. It is ironic but perhaps natural that science, the discipline which has most fundamentally shaped contemporary life, is one of the last to receive adequate literary recognition. Such books as W. C. Dampier's "History of Science" have helped provide the intelligent layman with some notion of the scientific tradition. It is only in the last thirty-five years, however, that any attempt has been made to write definitively of science's evolution. "The Life of Science," reviewed below, is a collection of essays by the leader of the movement, the Belgian-born George Sarton. . . . Since the Twenties fiction writers have been exploiting the theories of Freud and Jung, but Roy Basler's somewhat pedestrian "Sex, Symbolism, and Psychology in Literature," which is reviewed here, is one of the first attempts to apply their approach to human conduct to the literature of the past.

Clinical Demonstrations on Four Poets

SEX, SYMBOLISM, AND PSYCHOLOGY IN LITERATURE. By Roy P. Basler. New Brunswick, N. J.: Rutgers University Press. 1948. 226 pp. \$3.50.

Reviewed by HARRY LEVIN

IN spite of its title, this is neither a sensational nor a very pretentious book. Its introductory essay is a moderate plea for the interconnection of the four portentous categories that come together on the title page. The essays that follow are individual studies of works by two English and two American poets: Coleridge, Tennyson, Poe, T. S. Eliot. Texts of the relevant poems and sketches are also included; indeed, they constitute nearly half of a fairly short volume. Since his commentary is somewhat repetitious and oversimplified, the author's contribution does not bulk very large. However, it is helpful as far as it goes, and it goes just about far enough to span the distance between the hostile layman and the elementary student.

In an area where speculation has flown perhaps too high, Mr. Basler is a sturdy pedestrian. He disarms his readers by utilizing some of the best-known anthology pieces in the language for purposes of clinical demonstration. He has selected these examples shrewdly, with an eye to their manifest sexual content, beyond which he seldom attempts to penetrate. After all, it is neither difficult nor farfetched to underline the fragmentary suggestion of Lesbianism in "Christabel." The traumatic experiences that turn love to madness are registered quite explicitly in "Maud." The projection of fantasies and obsessions finds its textbook cases in Poe. And where is the theme of frustration

celebrated if not in "The Love Song of J. Alfred Prufrock?"

Mr. Basler's "modern nonrational psychology" is a secular version of psychoanalysis, operating on an eclectic level where Freud and Jung mean almost the same thing. Of other psychoanalytic researches or psychological theories, either Mr. Basler is innocent or else he keeps his readers in innocence. Malinowski and Frazier (sic), however they may disagree between themselves, are Mr. Basler's anthropological authorities. His method, though he calls it "explication," is not stylistic analysis; it is a running paraphrase, emphasizing the characters and emotions it encounters and translating the poet's diction into the psychologist's terminology.

To concentrate upon a single writing, while paying little heed to the writer and his other work, is justifiable in esthetic criticism. But, psychologically speaking, it is naive to assume that we can understand what motivates an artistic creation without understanding the motives of its creator. The significance of symbols cannot fully be determined except by the pattern they make against the totality of the artist's expression. The water-snakes in "The Ancient Mariner" make their comment on "Christabel," and "Locksley Hall" lends additional meaning to the Hall in "Maud." The recurrent imagery of exhumation in Poe or of drowning in Eliot—these illuminating associations are shut off by Mr. Basler's limiting approach.

Except for his subjective reading of "Ligeia," which parallels Edmund Wilson's treatment of "The Turn of the Screw," Mr. Basler leaves scant room for argument. It may well be that, in psychological interpretations

of literature, insight and common sense are inversely related: perceptive interpreters often read things into their subject matter, while sensible interpreters tell us things we already know. Mr. Basler's book, which is nothing if not sensible, will help to spread our knowledge if not increase it. But it will prove misleading if, in belaboring various straw

men, it spreads the idea its author is a pioneer. To clamor for critical recognition of psychoanalysis — if Mr. Basler will overlook the symbolism — is to knock at an open door.

Harry Levin, chairman of the department of comparative literature at Harvard University, is the author of "James Joyce: A Critical Introduction."

Genesis of "Progress"

THE LIFE OF SCIENCE: Essays in the History of Civilization. By George Sarton. New York: Henry Schuman. 1948. 197 pp. \$3.50.

Reviewed by ASHER BRYNES

GEORGE SARTON is one of the few modern scholars of whom it can be said that he is not only the biggest man in his field, but that he also discovered it in the first place. In 1912 he began the publication of *Isis*, a quarterly journal devoted to the history of science. It is still, under his editorship, the principal periodical devoted to the subject. Subject? Perhaps one should rather call it a movement. Since 1912 the numbers of researchers treading on his heels have increased to such a pitch that no less than four more special journals are required to handle their output. Dr. Sarton also edits *Osiris*, wherein he prints material too lengthy and technical for *Isis*. Another journal, *Annals of Science*, publishes papers dealing with the modern period alone; and a further specialization is provided for by *Ambix*, which is devoted to alchemy and other early chemistry, and by the *Bulletin of the Institute of the History of Medicine* (Johns Hopkins)—the title of which is self-explanatory. This brief periodical list takes no account of the many recent series of books on the history of the sciences, or of separate works. Some of these are of encyclopedic dimensions.

And here again Dr. Sarton shines in the forefront. His "Introduction to the History of Science" is the most encyclopedic compendium of all; its scale is so vast that anyone who looks at the volumes which have already appeared will wonder what the history itself will be like, if they are merely the introduction to it. We are sufficiently familiar with cooperative projects that involve hundreds of scholars. This is one that could take centuries of time. Dr. Sarton illustrates the scope of his conception of the history of science by reminding his readers of the "Acta Sanctorum," the first volume of which appeared in

1643 and which is still in progress; and of the history of French literature, which beginning in 1733 and under the Academie des Inscriptions since 1807, has now reached the fourteenth century. Dr. Sarton's Introduction has also just reached the fourteenth century.

These magnitudes of chronology are more mysterious to the modern mind than our statistics of interstellar space. Perhaps Dr. Sarton's final achievement will be that of making us aware of the dimensions of science itself. In the nature of things it must be greater than the enumeration of the phenomena it has enabled us to control. Science approaches the problem of the unknown through what is already known, and the velocity of its progress is therefore proportionate to the knowledge mastered at any given moment. Dr. Sarton summarizes the process beautifully.

However, there is no pressing reason why the scientist should bear in mind the genesis of the discoveries which are now the data of his field of experiment. His interest in that part of the story is limited by the arduous character of the job in hand. An awareness of lines of inquiry exhausted by similar workers keeps him from repeating their mistakes; a familiarity with inquiries that have partially succeeded shows him, more and more accurately, where the truth lies. But with all these aids he must in the final analysis do his prospecting for himself. When so occupied he stands, from one point of view, upon the shoulders of the scientist who preceded him. From another he strides at the head of the human procession. The first is the workmanlike way of looking at scientific activity; the sec-

ond is the spectator's. Why the scientist sometimes steps out of character and, beholding his function through both viewpoints simultaneously, fills the air with double-talk about everything on earth and in heaven—this is the particular mystery of the twentieth century.

We have reached the point where relatively small additions to our stock of scientific knowledge may have social effects which are of another order of value entirely. The atom bomb was an evolutionary development in the laboratories; its social impact was, and continues to be, revolutionary outside. Consequently the scientists who participated in that achievement are tormented by the contrast between the humanistic conservatism of their intentions and the mechanical radicalism of their results. In theory nations which can move or "progress" merely by taking thought, merely by peaceful experiment and investigation, need not shoot one another down to find more room. Nevertheless they shoot or bomb each other with the products of the scientist. He is caught in the middle; winners and losers of our horrible modern wars show an increasing tendency to blame him equally.

Apparently the fundamental humanism underlying his effort, together with his consequent claim for absolute freedom in which to carry on his self-appointed task, has not raised him safely above the political struggles of the hour. Whether he likes it or not he is in them, and up to his neck. The easy way out of this dilemma is to cut his connection with the past of science and with the future projected by it. If he is blamed as a partisan he may as well take the wages of partisanship. He may as well join the party of mechanical revolutionaries who place the highest current value on his research products. Where that party is in power he can serve it as a technician. Where it is not he can adopt its ideology.

Against this abandonment of science, Dr. Sarton, who knows more about its history than any man alive, has raised a barrier of books. The books say that progress in pure science became rapid because the value of discoveries was no longer judged by crowds or determined by those who led them, but was sifted by scientists themselves, by men who, as scientists, were free. By men who were maintained and encouraged in such freedom by the rest of us because we grasped the truth which precedes science itself; as men we are less than what we contemplate, and we are more than what we understand. Perhaps we have to teach this to the scientists again.

