that her husband only found in her a substitute for the boy he desired, she returned to her parents. Such is the reconstruction Professor Wilson Knight makes from the *Don Leon* poems which claim to tell the whole story with Byron as narrator. Perhaps he makes out too clear a case, for after all we hear nothing of these unnatural tendencies from Byron's subsequent mistresses who were outspoken ladies. His own protestations of guilt are very general indeed and are not necessarily connected with sex; certainly in some cases they would seem to refer to other sins; George Coleman on the other hand does seem to be obsessed with unnatural sex. Whatever the truth is, Professor Wilson Knight has done his work with the utmost dignity, tact and detachment, but it must be emphasized that this is a piece of biographical detection, not literary criticism. Byron's poetry remains as great as ever, no more and no less.

GERARD MEATH, O.P.

WHAT AUTOMATION DOES TO HUMAN BEINGS. By George Soule. (Sidgwick and Jackson; 15s.)

AUTOMATION: FRIEND OR FOE? By R. H. Macmillan. (Cambridge University Press; 8s. 6d.)

These are two of several popular accounts of automation published recently. As a pair they are in striking contrast. *What Automation Does to Human Beings* is an intensely American book, well-meant but by English standards protracted and inclined to superficiality. *Automation: Friend or Foe?*, on the other hand, is a careful and considered survey, based on a series of broadcast talks. Its author, who has recently been appointed to the chair of engineering in Swansea, believes with good reason that discussion of the effects of automation must be based on an understanding of how it works, and he illustrates his points by taking the reader step by step through carefully-chosen examples of automatic mechanisms. The writing is delightfully lucid and succinct, and the book as a whole is difficult to fault. One small correction: the Ferranti Pegasus computer uses punched tape, not punched cards.

MICHAEL HOSKIN

SCIENCE AWAKENING. By B. L. van der Waerden. (Groningen, Holland: P. Noordhoff; n.p.)

It is always exciting to uncover popular fallacies, and in few fields can they be as numerous as in the history of science. What other study can offer *canards* to rival the almost universal conviction that the medievals thought the earth was flat, or the repeated assertion even among scholars that Galileo was the first to challenge Aristotle's dictum that bodies of different weights fall with different speeds? Professor van der Waerden's exclamation, 'How many fairy tales circulate as

"universally-known truths!",' shows that he finds a similar fascination in the study of what the book calls 'antique mathematics', and his consequent scepticism is one of the most refreshing features of this work which despite its title is devoted largely to the pure mathematics of the Egyptians, Babylonians and Greeks. The author is a distinguished geometer, and those who are interested in the elementary but often intricate mathematics of pre-Christian times have at last a comprehensive, scholarly and truly mathematical work written with a disarming friendliness of style.

Unfortunately, an attempt has been made, by the addition of sketchy background introductions to various chapters together with a number of admittedly beautiful illustrations and some talk of the importance of pure mathematics, to turn this important mathematical study into something like a history of culture; hence the misleading title, and the sudden changes of style which occur. The work is also marred by the poor translation, which constantly reminds the reader of the book's foreign origin and is responsible for such curiosities as the pages devoted to 'The epigones of the great mathematicians', and by the irritating way in which section headings occur in the middle of sentences and are displayed with equal prominence whatever their status. But these are minor defects, which those interested in the history of mathematics will be only too glad to overlook.

MICHAEL HOSKIN

SCIENTIFIC HUMANISM AND CHRISTIAN THOUGHT. By D. Dubarle, O.P. Translated by Reginald Trevett. (Blackfriars Publications; 10s. 6d.)

This little book is a collection of five essays or lectures dealing in the most general terms with the influence of science on the future. The first three are mainly concerned with new ideas and techniques and their possibilities. In chapter four, Père Dubarle discusses matters in which science and philosophy make contact: 'The ancient synthesis contains an ambiguity. . . . If philosophy in the past has been the matrix of the sciences, it is essential that the organism to which it has given birth should one day fulfil its own destiny independently and so, in return, liberate and purify a function to which it is itself in debt' (pp. 80, 83). The last chapter deals with the attitude of Christianity to scientific progress.

In his preface, the author apologizes for the repetitions and lack of cohesion, and it seems ungracious to remark that these defects are only too apparent in the pages which follow. Cybernetics, for example, is one of the 'present-day scientific ideas' discussed in the excellent second chapter. But the same subject crops up in the first and third chapters, and, as if to emphasize the absence of an editor's hand, we find Wiener's