

Mona Lisa and Leonardo would not have translated the book of Nature into the mathematical language. The fact that none of their countless contemporaries, though exposed to exactly the same states of scholastic science and social changes, produced anything approaching their achievements would have made this obvious to anyone not bemused by a theory already impregably fortified against the onslaught of facts of any kind.

The influence of scientific knowledge on social history has been badly overlooked in the past, but the fault is not rectified by exaggerating into a major cause the slight effect of social changes on the direction of advance of scientific knowledge. The path from this error of State control of science is fatally easy. If I were not too timid I would express myself strongly on this matter.

HERBERT DINGLE

ARCHÆOLOGY OF LACHISH IN THE NEAR EAST

The Wellcome-Marston Archæological Research Expedition to the Near East

Lachish 3 (Tell ed-Duweir): The Iron Age. By Olga Tufnell. With contributions by Margaret A. Murray and David Diring. Text, Pp. 438. Plates, Pp. 10 + 130. 2 Vols. (London, New York and Toronto: Oxford University Press, 1953.) £8 8s. net.

IT is now generally accepted that Tell ed-Duweir marks the site of the ancient city of Lachish, which was frequently mentioned in the Old Testament and twice in the ancient Assyrian records. The present volume, well printed and illustrated with excellent photographs, describes the successive foundations of the city and the changes which occurred from approximately 1180 B.C. to the middle of the fourth century. During that long period there seem to have been at least five major rebuildings, of which architecturally the most interesting are those between periods 3 and 1.

There is some doubt as to who may have been responsible for the heavy burning of the city in the twelfth century B.C., though inevitably that event must in some way be correlated with the Peoples of the Sea; but whether or not the destruction was due to a punitive attack by the Egyptians cannot be decisively proved.

In levels 4 and 3 the contents of the tombs as well as what was discovered in the city show that the place was in close contact with Egypt, and the archæological evidence would suggest that the phase of economic decline which occurred towards the end of this period may well have been due to the fact that it was cut off by increasing pressure of Assyria on North Syria from any northern trade.

In the next phase, which covers the eighth century B.C., there occurs a wheel-burnished pottery of very good quality, a type which had come into general use in the city of Samaria in about 800 B.C. and is a means of providing a valuable synchronization. To this level, too, belongs a series of early Hebrew characters on royal stamps, and these form part of the dating evidence used as a basis for the chronology by Dr. David Diring.

The end of period 3 is clearly defined by a violent burning and destruction. The evidence supports the author's conclusions that this event is most probably to be ascribed to the conquest by Sennacherib of the

city in 700 B.C., an event recorded not only in the Old Testament and the Assyrian records, but also actually illustrated on a bas-relief discovered by Layard at Nineveh. It is therefore significant that the architecture of this phase was obviously related to a contemporary style in Assyria. The most important of the monuments is a well-dressed limestone podium surmounted by mud-brick, which is characteristic also of the Sargonid occupations at Khorsabad and Nimrud. It appears, however, that this architectural style, so strikingly illustrated in Assyria during the eighth century B.C., has a longer history behind it in Palestine, and this discovery at Lachish therefore raises an attractive problem.

No less interesting architecturally is a stone building in the latest level 1, which has been appropriately named the residency of the Persian governor. This is rightly thought not to be Achæmenian in style, but to reflect a Syro-Hittite origin. Here, however, we may perhaps also look to Assyria and find a parallel in a spacious residency of the sixth century B.C. discovered by Andr e at Assur.

This volume contains a great variety of significant material which has been well set out for study by scholars, and in itself provides a mine of important information. A debt is owed to the many authorities who have contributed to this work, but most of all to the devoted labours of Miss Olga Tufnell, who has in exemplary fashion set out the results of this expedition and overcome the very great difficulties which must beset anyone who attempts publication when the leader no longer survives to complete his task. The Wellcome-Marston Trustees are to be congratulated on this admirable achievement.

M. E. L. MALLOWAN

STUDY OF MANAGEMENT

The Principles and Practice of Management

Edited by E. F. L. Brech. Associate authors: R. M. Aldrich, A. W. Field, J. Maddock, and Frank L. Woodroffe. Pp. xvi + 752. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1953.) 50s. net.

SCIENCE or art: academic or practical: graduate or man from the shop floor? These are among the questions which are being hotly discussed in industry to-day; the answers may well decide the future of industrial endeavour in Britain and, inseparably, the whole pattern of the British way of life.

For these and other reasons "The Principles and Practice of Management" is an important book. In it the editor and his associate authors unflinchingly declare their faith that, while management at all levels must be learned by practice, there is also a considerable body of knowledge which can be studied and which no competent manager of to-morrow can afford to ignore. They have been jointly concerned to present some of this knowledge and, for the attempt alone, are to be warmly commended.

The book is divided into six parts. The first presents the analytical framework within which the whole process of management is reviewed and the underlying principles examined. The last is concerned with management in practice and deals with such topics as the functional principle, the use of committees in organization and the place of management in national affairs; both parts have been