BOOK REVIEWS

The Editors accept for review books which make a significant contribution to management thinking, practice or education, whether these fall within the subject matter of economics, sociology, psychology or any other discipline or field of knowledge of relevance to managers. It is not their aim, however, to review books of interest primarily to specialists who are already well served by other journals. Wherever possible reviewers will be encouraged not only to inform readers of the contents of the books with which they deal, and to give a critical appraisal of their value, but also to place them in the context of other contributions to knowledge which have been made in their fields.

ACCOUNTING

Accounting and Analytical Methods. By RICHARD MATTESSICH (Richard D. Irwin, Inc. 1964. Pp. xvii + 552, \$12.00).

Accounting for Management. By Eric L. Kohler (Prentice-Hall 1965. Pp. xi + 275, 48s.).

Accounting for Management Analysis. By DAVID H. LI (Merrill 1964. Pp. xxiii + 579, 72s.).

Accounting for Industrial Management. By Roy SIDEBOTHAM (Pergamon Press 1964. Pp. vii + 197, 258.).

Case Studies: Pillars of Management Accounting Series, Vol. 4. By E. D. C. Evans (Macdonald and Co. Ltd. 1965. Pp. xv + 128, 25s.). Cases in Financial Management. By R. L. Norgaard and J. R. Longstreet (Wadsworth Publishing Co. Inc. 1964 (2nd Ed.). Pp. xv + 269, 32s.). Topics in Business Finance and Accounting. By J. W. Bennett, J. McB. Grant and R. H. Parker (F. W. Cheshire Pty. Ltd., Melbourne 1964. Pp. vii + 199, 40s.).

The Mathematics of Money. By H. Jones (Blackie and Son Ltd. 1965. Pp. xiii + 225, 30s. paperback, 15s.).

Mattessich's Accounting and Analytical Methods shares little common ground with the other books reviewed here, and merits separate consideration by virtue of its outstanding contribution to accounting thought. An increasing number of accountants realize the need for re-thinking, but there are very few who could have attempted Richard Mattessich's monumental task of formulating a general theory which the discipline lacks. Mattessich's experience in several countries has confirmed in him the belief in the necessity for conceptual clarification and for a unifying foundation for the various systems found in micro- and macro-accounting. His argument is that there must be a uniform framework in order that an accounting model can be systematically developed for a particular purpose or specific situation.

The suggested analytical approach requires a clear definition of the boundaries of accounting and a clarification of its basic assumptions. These assumptions, eighteen in all, which most writers have in the past ignored, are examined closely, and are related to modern measurement theory and the problems of valuation. In considering the various forms of presenting accounting measures he introduces the network, matrix, and vector forms.

The various concepts of value are examined critically, and in the latter part of the book planning models are discussed. A general formulation of a periodic budget designed for the purpose of simulating the financial aspects of the firm is introduced at this point. In his concluding chapter, 'Accounting, a Management Science', accounting is presented as requiring an inter-disciplinary effort on the part of accountants and operations analysts.

In this book Mattessich develops at length the ideas which he expounded in 1957 in his first attempt to axiomatize accountancy. He does not claim that he has formulated a complete theory, but he has indeed performed a prodigious feat which should serve to stimulate all who are concerned with the future of the accountancy profession. Specialists in other fields will be helped considerably in their desire to relate accounting to their own areas.

The three books by Kohler, Li and Sidebotham, despite their similarity of title, contain substantial differences of emphasis and treatment, presumably generated by the interpretation which the authors have chosen to place on the expression 'Accounting for Management'.

Kohler and Li, both American writers, have apparently felt it necessary to give the reader a grounding in general financial accounting before introducing him to the ways in which accounting can contribute to the decision-making process. Admittedly such treatment is not totally irrelevant, but when, as Kohler has done, the author devotes one half of the book to financial accounting aspects, the work is not only thrown out of balance, but its value to the U.K. reader is reduced, since it is in the area of financial accounting that differences in terminology between the U.K. and U.S.A. are most acute. In any case it is surely more important that management should be able to interpret rather than prepare financial accounting statements.

Some sections of Kohler's book are very good indeed, e.g., his discussion of the depreciation concept, the L.I.F.O. method of stock valuation, flow statements, and the audit function. There is, however, too much preoccupation with detail and definition and too little discrimination about content. Possibly Mr. Kohler's approach has to some extent been conditioned by his previous highly successful publication 'A Dictionary for Accountants' where a different emphasis is undoubtedly required.

D. H. Li's style and form of presentation are superior to Kohler's. Precise definition is avoided, but technical terms are explained adequately and the basic accounting assumptions are clearly stated. The greater part of the book

is concerned with various aspects of management accounting and the field is comprehensively surveyed. No person requiring an introduction to this field of accounting will be disappointed. The author does not deal with financial accounting aspects in such detail as Kohler, but he also includes aspects which could have been omitted.

Li's treatment of budgeting calls for special comment. It is thorough and well-illustrated. He lays emphasis on 'responsibility accounting' and on the controllable aspects of variances. He considers standard costing and budgeting from both the control and planning aspects and illustrates the use of cost/volume/profit analysis for budget revision purposes. His chapter on 'Planning Capital Acquisitions' illustrates the application of the D.C.F. approach to a computer feasibility study. In 'Relevant Costs and Short-term Profit Planning' he gives a good account of the value and limitations of the concept of the 'contribution' and the chapter on 'Accounting for Management Analysis' is a very good treatment of the uses and limitations of profit ratios. Approximately one half of this book is devoted to questions, problems and cases. The cases, covering some 157 pages, are, the author states, generally based on actual business situations. They should add materially to the value of this book as a teaching medium.

Professor Sidebotham makes no attempt to cover a wider area than the title of his book suggests. He concentrates on industrial cost accounting and management accounting aspects of the subject. His approach follows a logical pattern and gives a general background to anyone seeking an introduction to these topics.

The book is based on the author's university lectures during the years 1955 to 1964, and is addressed to different types of students, viz., undergraduates, young executives, and senior businessmen wishing to keep abreast of developments in accountancy as an instrument of control. Undoubtedly each of these categories could benefit from reading this book, but there is always a danger in trying to establish common ground for groups of readers who require a different emphasis. The undergraduate would, for example, have been helped further by some discussion of cost concepts and from a comparison of the break-even chart or profit graph with the economist's presentation of cost curves. Business executives, on the other hand, could have derived additional benefit from some discussion of project evaluation and funds statements. It must however be remembered that Professor Sidebotham makes no claim than that he is offering an introduction to the subject.

Over a series of years the Management Accounting Research Unit at Slough College has conducted several case studies of problems submitted by firms of various sizes operating in different industries. A selection of these studies, together with the reports of three postal surveys, has been arranged for publication by the director of the Unit, Mr. E. C. D. Evans, and appears as volume 4 in the 'Pillars of Management Accounting Series'. The publishers stress that this should be read in conjunction with the three previous volumes in the series. However, any person with a reasonable knowledge of business administration and cost accounting could study volume 4 in isolation. There are in all 10 case studies, covering problems connected with distribution, forecasting, production control, organizational structure, stock control, credit control, and certain aspects of costing. Each gives a brief background of the firm, states concisely the nature of the problem, and sets out in the form of a report the recommendations of the Unit. In some of the reports an appendix sets out alternative recommendations, prepared by an independent adviser on behalf of the publishers.

The main difficulty, as with previous volumes in this series, is that of attaining a high degree of condensation of material without affecting quality. The book does, in fact, suffer from over-compression, but if the student acts on the author's suggestion and prepares his own solution for comparison with that of the Unit he will undoubtedly benefit from these case studies.

The cases presented in Norgaard and Longstreet are not only more numerous (35 in all), but have a different emphasis from those discussed in Evans' Case Studies. This book deals mainly with financial, as opposed to costing matters, but some of the material, e.g., inventory control and capital budgeting would normally be considered management accounting topics, illustrating the fact that the dichotomy is far from clearly established.

The case histories are well presented and are supported by a judicious use of comparative tables and other relevant statistics. The criticism here might well be that in some instances too much detailed information is provided. The authors make no attempt to provide the student with a solution of any kind. Possibly this is an advantage, since the aim of the case study method is to induce the student himself to make a decision after careful assessment of all relevant information. In any event there may well be different solutions of equal merit, a fact which a serious student should be encouraged to accept from an early stage in his training. In a few of the cases the issues are not clear-cut and several problems are covered. The student is thus required to identify the fundamental nature of the problems and in this way his analytical powers are stimulated. This approach has the advantage that it prevents the student from becoming too preoccupied with techniques. Not all the cases can be used in U.K. without some adaptation — this is particularly so where taxation or legal points are involved. However adaptation, if required, should not be particularly difficult.

The authors claim that the cases in this book are directed at the student taking basic finance courses, and are designed to challenge both the advanced undergraduate and the beginning graduate student. Possibly this claim is

too modest, as some of these cases could be used with advantage at advanced seminars attended by practical businessmen. The degree of sophistication and the general approach certainly make this book a valuable instructional aid if used at the right level.

Fundamentally the theme of these two books by Bennett and others and by Jones is the same, viz., that the time dimension in financial matters cannot be ignored. It follows that there must be some common ground and indeed in both books such matters as annuities, loan redemption, leases, hire purchase, and investment appraisal are covered, although not to the same degree of intensity.

The problems with which Jones is concerned can practically all be solved with the help of two basic tables — the compound amount of 1 and the compound amount of an annuity of 1 — and their reciprocals, the present values of 1 and of an annuity of 1. These problems he covers very thoroughly and clearly, concluding with chapters on the problem of changing money values and the effect of Income Tax on annuities, loan repayments and yields. No reference is made to the Capital Gains Tax, although this is of course relevant to redeemable securities.

Bennett and his co-authors express concern at the insufficient attention given in most texts to the importance of the time factor in corporate finance and accounting, and they seek in this book to remedy the deficiency. They cover a somewhat wider range of topics than Jones, and make use of rather more sophisticated techniques. However, as they point out, apart from the chapters on 'the cost of corporate capital' and 'Investment Analysis' which require some knowledge of calculus, an acquaintance with the rules of elementary algebra will suffice for an understanding of the other problems discussed.

Starting from a discussion of basic ideas and procedures underlying simple and compound interest and discount, and present values of annuities, the authors then proceed to discuss the effect of the time factor in relation to various specific financial and accounting problems, viz., the measurement of the cost of corporate capital; investment analysis (project evaluation); the measurement of business income with particular reference to depreciation and the valuation of stocks; hire purchase and instalment purchase transaction problems; lease financing; the valuation of unquoted shares and goodwill; accounting for bonds, loans and debentures.

An approach of this kind is highly commendable, but one should perhaps bear in mind the possible danger of attributing absolute precision to solutions based on mathematical formulae where in fact the underlying data are themselves the subject of estimates.

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MANAGEMENT ORGANIZATION

The Managing of Organizations. Volumes 1 and 2. By BERTRAM M. GROSS (Free Press of Glencoe: Collier-Macmillan, London. Pp. 971, 189s.).

This pair of magnificent volumes in their elegant case must surely become an annual prize bestowed by company chairmen to The Manager Most Likely to Succeed. It is superbly printed and carries an authentic odour that goes well with pigskin and Old Spice.

It has another characteristic of prize-books in that it is more likely to be respected than read. Its great length will ensure that the only managers and administrators likely to read it will be those who catch up on their War and Peace during vacations in remote villages in Greece, and even teachers will be disposed to dip into it rather than swim steadily through its thousand pages.

But there is a further reason why its readership not only may, but should, be limited. The author has attempted a grand, synoptic sweep of the administrative field and its place in modern society. A vast range of writings and research has been mobilized and distilled for the purpose, and all the social sciences — economics, psychology, sociology, anthropology, and political science — have been milked for their contribution. The result makes the book unsuitable for beginners — indeed for all those without a substantial background of reading in the field. Plunged into this sea of exposition (there is a Bibliographical Report of 55 pages), they will lose heart, confidence and breath, in that order. Its value will be for those who can glimpse the innumerable facets of administration without falling into confusion, and who can admire the author's eclectisicm while remaining aware of important aspects or implications of other men's contributions which have somehow become muted — or even excluded.

Volume One leads on the theme of the 'administrative revolution' — of the fact that science and technology have been able to change the face of the world only through the use of administered organizations. Then follows a survey, on what are becoming conventional lines, of the successive phases of organization theory — Weber, the Scientific Management school, Human Relations, Barnard, Simon and systems theorists. In a section entitled *The Emerging Integration* the author then offers what he sees as the consensus of modern administrative thought. This is inevitably on a high level of generality: a distillation of common propositions, not a model. We then move to the human element — to a statement, surprisingly uncritical for a practical administrator, of Maslow's 'hierarchy of needs', followed by a discussion of individual psychology in relation to the group, and of 'people-in-organizations', both formal and informal aspects. Understandably, the sources drawn upon for this organizational exposition are overwhelmingly American, but

even so some of the omissions of English and French writers are disturbing. Thus Wilfred Brown, Elliot Jaques and Tavistock writers get a mention, but not Joan Woodward, Burns and Stalker, or any of the Liverpool publications, nor Michel Crozier and Georges Friedmann of the French school. The last two chapters of Volume One deal with the organization's environment, first in such immediate terms as clients, suppliers, competitors, and government, and second in terms of the broader social environment.

In Volume Two the author takes up the question of organizational purposes. These he sees as: the satisfaction of interests 'of various people, both members and outsiders'; the output of services or goods; efficiency; viability and growth; the mobilization of resources; the observance of codes (formal and informal rules and prescribed behaviours); and finally, rationality (action patterns regarded as satisfactory in terms of desirability, feasibility, and consistency). The elaboration of each of these themes in turn takes up most of the volume, and contains much of great insight and subtlety, though it greatly upsets the balance of the book.

The concluding three chapters look to the future. Here the author examines the challenge presented to man and society by the administrative revolution, discusses the emergence of administrative science, and raises the problem of administrative education.

How can one comment fairly upon such a tour de force? Its very accomplishment is an achievement deserving of profound respect, as are all works of such dedication and breadth. Especially does this one evoke admiration, for it is the work of a mind which can hold in superb balance the methods of economics and the scholarship of history, the concepts of political science and the hardly-won experience of the practical administrator. The style is measured and civilized, reflecting a liberal-humanist intelligence which is in touch both with the heritage of the past and the challenge of the future. This is no book to turn to for the analytical model which stirs intellectual excitement, nor for an encyclopaedic coverage of other men's thoughts. But as a grand synthesis which, on the one hand, views the formal organization in its broadest possible social setting, and, on the other, exemplifies the impressive diversity of organizational studies and analysis, it well earns its expensive place on the library shelves.

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Men, Management and Morality. By Robert T. Golembiewski (McGraw-Hill, 1965. Pp. xiv + 320, \$6.95).

Glacier Project Papers. By WILFRED BROWN and ELLIOTT JAQUES (Heinemann, 1965. Pp. vii + 277. 358.).

As with so many Americans, Robert T. Golembiewski's sources are so

wide that one wonders how he has had the time to do so much reading. His theme is that the prevailing pessimism about the future of man in organizations is wrong. Many of the pessimists have assumed that there is a single theory of organization and that this theory excludes organizations as areas of moral behaviour operating in terms of the ethics of the community to which they belong (in this case the U.S.A.). Golembiewski denies that there is a single theory of organization and collects persuasive evidence that industrial organizations which follow the Judaeo — Christian Ethic (derived somewhat dubiously from a report of a study committee of the Federal Council of Churches and advanced as, 'A derivation from our moral tradition') are more likely to be successful than those which do not.

Golembiewski is expecially good at tracing the history and development of ideas and his analysis is very interesting even to one who disagrees with his ideological position. He is a careful and thorough writer and his book should be read by all who are concerned about moral behaviour and complex organizations. Whether his analysis is comforting or not will depend largely on individual attitudes to the moral code he advances.

To anyone still unfamiliar with the Glacier project Lord Brown and Elliott Jaques' book will provide a useful introduction. No other company has indulged in such painstaking analysis of its organization in the past twenty years as the Glacier Metal Company. Continuous research over the period has been regularly reported in books and articles mostly by the authors of the book under review together or individually. When so little systematic research is being done it seems, therefore, ungrateful not to be able to view the work of Glacier with more enthusiasm, but the methods and conclusions of the enquiry are impossible to accept uncritically. However, in an article of this length it is not possible to give an exhaustive critique and a few examples will have to suffice.

Throughout the book work by others in this field is largely ignored. There are few references to other research or other theories of organization and where there are references these are often as generalities. Thus Wilfred Brown in an essay entitled 'Informal Organization?' previously published as 'A Critique of Some Current Ideas in Organization', gives no idea of whose views are being criticised nor reference to a single source. Again at the end of the first essay in the book 'Organization and Science' he writes, 'This essay is an attempt to set down the basis upon which organization can be thought about, studied and discussed. I have tried to discover if anyone has done the job already but I have found no such statement which satisfies me,' (p. 28). It is not difficult to think of authors whose work merits more serious consideration than this. This is especially true in that the essay is really a discussion of methods in the social sciences generally. Conceptualization, definition, classification, scientific method, validation, etc., are not exclusively

problems of studies in industrial organization but Brown treats them as such. A few examples from this opening essay will serve to illustrate a further source of criticism, a disturbing imprecision of thought. At one point we are told that one of the consequences of the erroneous assumption that 'highly sophisticated instrumentation and techniques of measurement... (are) the sine qua non of analysis,' is that 'The study, analysis and conceptualization of many important social problems is not attempted because instrumentation and measurement cannot be brought to bear,' (p. 6). But later we are told that 'we come to realize that an assumed property of a thing may not exist unless we are able to state the operations by which it is measured,' (p. 21). This appears to be an attempt to have it both ways. Nor is there likely to be uncritical acceptance that a logical inference, from the perception, 'there are people who communicate the views of groups to others,' is, 'If they truly speak on the group's behalf then they must have been elected by the group to do so,' (p. 15). What does he mean by elected? How is this an inference? The author, it is true, writes that he is not satisfied with the statement of methodology in this essay but the imprecision is even more disturbing than the methodology.

There is not space to deal with the authors' conclusions in detail. Those who are sceptical about, for example, the theory of 'time span', or the necessity of eliminating informal organization, will find nothing here to convince them. The authors say much that is valuable but resolve few of the doubts about the value of their contribution to the theory of organization.

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PROFESSIONAL WORKERS

The Qualifying Associations: A Study in Professionalization. By Geoffrey Millerson (Routledge & Kegan Paul, 1964. Pp. xiii and 306, 42s.). Professional Employees: A Study of Scientists and Engineers. By Kenneth Prandy (Faber, 1965. Pp. 197, 32s. 6d.).

Professionals are one of the fastest growing occupational groups in the British labour force. Between 1911 and 1961 their numbers increased by 187 per cent, while their share of the total labour force increased from 4 per cent to 9 per cent. In spite of their growing importance, little serious research has been done on professional employees, on professional associations, or on the process of professionalization. The studies by Millerson and Prandy fill part of the gap in our knowledge about this increasingly important group.

After attempting to evolve a satisfactory definition of a professional and showing how their associations have developed, Dr. Millerson classifies professional associations into four categories: Prestige Associations (e.g., the Royal Society); Study Associations (e.g., the Royal Statistical Society); Occupational Associations (e.g., the British Medical Association); and Qualifying Associations — associations such as the Institute of Actuaries and the Inns of Court which aim at qualifying by examination those who wish to practice in a subject. He then goes on to examine the Qualifying Associations in greater detail by analyzing their functions and structure, describing their role in promoting professional education and professional ethics, and evaluating their overall contribution to society.

Basically there are three levels of research — description, classification, and explanation — and Millerson is best at the first two. The great merit of his book is that it brings together an enormous amount of historical and descriptive material and classifies it in an orderly and intelligent manner. Unfortunately the author rarely develops his work to the point of explanation and when he does it is rather superficial. What explanations there are generally take the form of a list of all the factors which could possibly explain a given phenomena with little attempt to assess their relative importance. In fact, the book suffers from far too many lists; much of the material could have been better digested and integrated.

Such criticisms are, however, minor. Dr. Millerson has done a valuable service by providing scholars with a map to guide themselves through the jungle of professional associations. By describing and classifying them, he has made it possible for an attempt to be made developing a theory of the process of professionalization.

The purpose of Dr. Prandy's study is to show that there are two forms of stratification — status and class — and that both are needed for an understanding of the behaviour of professional employees. He argues that those professionals who adopt a status ideology will tend to join professional associations, while those who adopt a class ideology will tend to join trade unions. Whether the professional adopts a class or status ideology will be determined largely by his work situation.

Prandy reduces the work situation to two basic elements. First, the degree to which the professional shares in the exercise of authority. Second, given the position of subordination, the degree to which the professional's employment situation emphasizes this fact. Those professionals who have an unfavourable work situation — low incomes, lack of promotion opportunity, impersonal work relationships, strict supervision, etc. — will tend to adopt a class ideology, while those with a more favourable work situation will tend to adopt a status ideology. Dr. Prandy's theory is thus an extension and amplification of Lockwood's thesis in *The Blackcoated Worker* that variations in the

degree of clerical unionism can be primarily attributed to variations in the work situations of different clerical groups.

Prandy's theory is an extremely plausible one, at least at the micro-level, and is presented very concisely and with great clarity. It is not altogether original, but is a fresh synthesis of many of the theoretical aspects of Marx, Weber, Merton, Dahrendorf, and Lockwood. The theory provides a good operational definition of trade unions and professional associations and emphasizes the basic difference between the two types of organizations: 'Trade unions are class bodies — they bargain with employers; professional associations are status bodies — they bestow a qualification and seek to maintain or enhance its prestige.''

Where Prandy falls down badly, is in his attempt to test his theory. He examines the attitudes of the members of three associations of technologists: the Institution of Metallurgists (mainly a status body), the Association of Scientific Workers (mainly a class body), and the Engineers' Guild (an association which exemplifies both class and status aspects). He sent a postal questionnaire to a 10 per cent sample of the members of the Institute of Metallurgists. interviewed 49 qualified Merseyside members out of a national total of roughly 3500 in the Association of Scientific Workers, and interviewed 44 Merseyside members out of a national total of 5000 in the Engineers' Guild. With the possible exception of the postal questionnaire, none of these surveys can be accurately described as a sample. The importance of regional factors in British social and economic life is well known, and the opinions of the Merseyside members are unlikely to be representative of the views of all the members of these organizations. Prandy grants that these members are 'almost certainly not representative of the whole country,' but he feels that the geographical bias does not 'create overwhelming objections.' However, he offers no evidence on this point to reassure his readers.

In spite of the lack of statistically respectable data, Prandy's study has provided a good conceptual framework for analyzing the propensity of professionals to join trade unions or professional associations. His theoretical formulation should prove useful to research workers analyzing the behaviour of other groups of white-collar employees.

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GENERAL MANAGEMENT

Management — Organisation and Practice. By Franklin G. Moore (Harper and Row, 1964, Pp. xiii + 625, 328. 6d.).

Administrative Action — the Techniques of Organisation and Management. By WILLIAM H. NEWMAN (Pitman, 1962, Pp. ix + 486, 458.).

Organisation for Profit — Management for the Age of Technology. By GERALD G. FISCH (McGraw-Hill, 1964, Pp. x + 321, 76s.).

Elements of Managerial Action. By MICHAEL J. JUCIUS and WILLIAM E. SCHLENDER (Irwin, Homewood, Illinois, 1965, Pp. xi + 496, \$8.).

Principles of Organisation and Management (Second Edition). By HENRY H. ALKERS (Wiley, 1965, Pp. xii + 676, 64s.).

The Management of Improvement: Concepts, Organisation and Strategy. By ROBERT N. LEHRER (Reinhold, N.Y., and Chapman and Hall, 1965, Pp. xiii + 415, 925.).

This is a selection of more recent American publications on general management problems. They can be dealt with fairly summarily, for none is particularly original either in its overall framework of analysis or in its treatment of specific problems. The first three listed evince, in the main, the traditional approach of the industrial administration school; the next two are more integrated in their analysis, in that they endeavour to bring the contributions of several disciplines to bear on management problems; and the last emphasizes the 'systems' and operational research approaches.

Moore's book is a well-written and useful introductory text at the level of formal organization and the traditional 'principles' of management. Indeed, the blurb assures us that it is written 'in the author's well-known facile style'! There are fleeting references to recent work in the social sciences, and a few particular contributions are acknowledged, but little endeavour is made to relate these to conventional thinking. The book lacks a good overview by way of introduction, and there is no conclusion at all. Newman's text is a revised second edition of his Principles of Administration, first published in 1950. New features covered are external relations, overall control, decisionmaking and logistics and strategy. In the author's own words, 'Although these and other revisions have been made, the main approach to administration has not been changed. The book is still built around the underlying processes of planning, organizing, assembling resources, supervising and controlling'. Indeed it is, and the approach is thoroughly conventional; it is administration without Argyris and Likert, or even Ernest Dale. Fisch is a consultant whose book, he says, falls into the category of 'books on organization dealing with modern practice, as seen through the eyes of persons who are acquainted with both the research and literature in the field and the day-to-day organization problems of a wide range of companies'. But although his approach is more up-to-date than that of the previous two, it is hardly adequate 'for the age of technology'. He seems to misunderstand much research in the social sciences, which he tends to jeer at. There is, however, a fair amount of common sense on particular problems, for example the perennial line-staff controversy.

Jucius and Schlender take us further. They say, 'The intent here is to present an eclectic picture of the manager... his managerial functions, the people he manages, and his behavioural complex'. But these are dealt with, in the main, separately; 'human relations', 'morale', 'motivation', etc., are distinct chapters, and there is no adequate preliminary consideration of the basic nature of organized cooperation, into which particular activities or functions can be fitted. Albers does this job rather better. He achieves a greater measure of integration, in that the contributions of various disciplines are built in more effectively in relation to the basic managerial processes.

Lehrer's is a useful book, and indeed a surprising one from an American industrial engineer. He recognizes the systems approach, and research, as basic to management improvement, yet is very much aware that the human factor is the key to success. The book is a good introduction to industrial engineering and operational research, in the light of the human problems involved.

Overall, a reading of these books is good for one's morale. Here, we tend to regard our systematic knowledge of management and organization as undeveloped and our efforts in this direction, in relation to the U.S.A., as somewhat backward. Although these books hardly qualify for the American 'top ten', they are nonetheless a representative sample of current transatlantic literature. As such, they confirm one's impressions of much else that one has read from across the water. They are inbred, and disregard research and thinking elsewhere; their quality is as variable as ever, with much that is hack and a little that is excellent, and by and large, their approach is as partial and conventional as most that one reads from other sources.

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INDUSTRIAL RELATIONS

Industrial Relations in Engineering. By ARTHUR MARSH. (Pergamon Press, 1965, Pp. 362. 30s.).

The engineering industry is probably the most complex of any in this country and its industrial relations, negotiations and procedures are a jungle which deter all but the most intrepid explorers. This is probably the reason why nobody has attempted a similar textbook before. Arthur Marsh is not only intrepid but even before starting his book he had the reputation of being the best-informed outsider on the subject.

His perseverance has paid off handsomely and we now have a model reference work equally suitable for management representative, trade union official and industrial relations studetn. The book will be boring to outsiders searching for an 'instant briefing' but it is a godsend to insiders struggling for a ready reference.

The author's full and fair accounts of the role and nature of the Confederation of Shipbuilding and Engineering Unions and the Engineering Employers' Federation are right on the mark. His many appendices reproducing everything of importance from the 'York Memo' and before, to the Package Deal Agreement of 1964 will be an invaluable supplement to the agreement books used on both sides of the industry.

It seems a pity the criticisms in the book are so muted. The nonsense of the pre-war basic rate must be finally abolished and full consolidation, well beyond the provisions of the package deal agreement, must be brought about. Both the E.E.F. and the C.S.E.U. need to be reformed and given more central powers and the system of special conferences in London will sooner or later have to make way for a National Joint Industrial Council. All this will have to be preceded by a higher staffing ratio in the unions and the E.E.F. organization so that not everybody is bogged down by routine duties. Some officials must be paid primarily to think and to plan ahead. I should like to have seen Arthur Marsh's views on these points put in some detail. The suggestions of the informed outsider often carry more weight on the inside than is appreciated.

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MANAGEMENT EDUCATION

Management Education in Five European Countries. By T. M. Mosson (Business Publication, 1965, Pp. 234, 45s.).

Management Education in Belgium. By G. A. G. Ormsby (Administrative Staff College, 1964, Pp. 24, 5s.).

Management Recruitment and Development. (N.E.D.C., H.M.S.O. 1965, Pp. 63, 5s.).

In 1922 R. H. Tawney wrote his 'Religion and the Rise of Capitalism'; in 1949 Canon V. A. Demant gave a series of lectures entitled 'Religion and the Decline of Capitalism'. Both recognized that the relation between religion and economic systems was close. But the effect of another totally new and important factor on the resilience of capitalism was not mentioned by Demant, namely, systematic business education and its impact on the ethics and development of managers. The revolution has been a rapid one. Such is the newness of career managers and the post-war management training revolution that is with us today. Nowadays management education is seen

by some as having a dominant role in national economic affairs as companies enter into international competition and grow in size and complexity.

T. M. Mosson's book 'Management Education in Five European Countries', is timely. It is basically an account of events since World War II. It aims to describe the major management education institutions in Belgium, France, Italy, Spain and the United Kingdom. Certain comparisons are illuminating.

'In each country studied the institutions involved in management education have been shaped by the society they set out to modify and it is in that relationship that clues which point to the role of management schools may be found.' (Page 1).

Four chapters are devoted to the British scene, one each to the other four countries and one to the International schools: C.E.I., I.M.E.D.E., and I.N.S.E.A.D.

Why, one wonders, were Italy and Spain included and not the management institutions of Germany and Holland? Certainly one might ask why the author did not even refer to their exclusion. However, in Spain we learn that the Society of Jesus is deeply involved in the ethics of management education and business leadership at undergraduate and post graduate levels. In Italy there is a low standard of general education, there are too few engineers, and management teachers are overworked. In France, where top managers are drawn mainly from the haute bourgeoisie and the status of the polytechnicien is high, there is no evidence that 'management education is overcoming the forces which reserve the highest management positions for a narrow social and educational elite.' (Page 78). The Certificat d'Aptitude à l'Administration des Enterprises is described. The reader can compare this with British attempts, following the Urwick report in 1947, to set up 2 national scheme of management studies at technical college level. In Belgium the bridge building role in national affairs of Fondation Industrie Université is explained.

These descriptive accounts of institutions and their national impact are by no means exhaustive and do not take personalities into account. The author does not indicate why these developments took the form that they did, nor does he discuss what might have been. But, even so, the British reader puts Mosson's book down with a better appreciation of the broad cultural forces operating in each country and a much clearer perspective of the management education problems facing the U.K.

G. A. G. Ormsby's occasional paper: 'Management Education in Belgium' goes into considerable detail. It indicates how the spectrum of interests — university centres, research into management and the management development needs of business — are brought into contact through representatives of all parties meeting within the aegis of the Fondation Industrie-Université.

A similar body, Institut Administration-Université, which covers the needs of public service, has recently been formed. Its Secretariat is the same as that of the Fondation. This mechanism has given a coherence and co-ordination to national activities that, the author notes, is missing in the U.K. (Page 18). Interesting as this paper is, it is not really clear why it has been commissioned, unless it is perhaps one of a series.

The N.E.D.C. report: 'Management Recruitment and Development' has received considerable publicity. The report, based on replies from 102 companies, emphasizes the need for partnership between the educational system and industry on ways in which more and better management education and training can be provided. It is another useful 'climate forming' report that refrains from making precise recommendations on how the resistances and difficulties of its well-meaning suggestions should be overcome.

Surveys and publicity of particular company approaches and successes in the area of management development would seem to be a desirable next step. From a national, and from many other points of view, the need for more training is accepted, but in practice some companies find it difficult to implement, especially when it means giving up managerial talent today for an indefinite pay-off some time in the future. Yet those companies that do not enter the race will get left behind.

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DECISION THEORY

Decision and Value Theory. By P. C. FISHBURN (John Wiley and Sons, 1964, Pp. 451, 1058.).

The Theory of Decision Making. By W. SADOWSKI (Pergamon Press, 1965, Pp. 292, 60s.)

Fishburn's *Decision and Value Theory* is No. 10 of the publications of the Operations Research Society of America and emanates from the School of Operational Research at the Case Institute.

Decision making is nowadays commonly considered to be the ultimate activity of management, and decision theory is often regarded as synonymous with O.R. and statistical method. Hence many books on decision theory turn out to be treatises on O.R. and statistical method and to have only a tenuous link with the procedure of decision making. This volume is not among them. It is a study, couched in the formal language of logic and mathematics, of the bases of decision making themselves. The introduction affirms that 'this book is concerned with the efficient pursuit of objectives. When doubts arise in an individual's mind... then the elements of indecision and subsequent decision beg in to form. This book is concerned with these elements and with

the... transformation of the state of indecision into a state of resolution'. Few managers will be in doubt that this is their concern.

One of the main difficulties of the subject has been the setting of relative values for the outcomes of the alternatives envisaged, more especially since the outcomes have always in practice, an associated probability so that the decision is being made from a state of uncertainty. Is the criterion for relative value to be the 'expected' (or average) value in such a case or would it be more reasonable and acceptable to some to judge on the upper (or lower) boundary of a 'likely range' of values? The assessment of probabilities and the basis of the ultimate decision must be personal matters; the first because probabilities are a manner of expressing limited information and because the amount of information available differs from individual to individual; the second because the value scale is essentially personal and temporary. Because of the subjective nature of decision making there has grown up a gulf between the manager and his advisers, the O.R. workers. The latter have preferred to limit themselves to the presentation of factual information or of predictions based on such information manipulated by mathematical analysis to a form in which it can be used by the manager. The manager has reserved to himself the actual making of the decision, rightly so since this is to be based on his personal scale of values at the moment. But this gulf cannot be helpful to either; this book provides the means of bridging it.

As the sub-title of Sadowski's book indicates this is a volume on operational research. It aims 'to acquaint economists and planners with the basic methods of operational research'. The author openly chooses the 'methods' approach to the subject rather than the 'problems' approach, believing it more lucid. It may, however, lead the reader to make the mistake, commonly made by authors in this field, of confusing the subject with the methods used so far. For corrective reading I recommend Duckworth's 'Manager's Guide to O.R.', Ackoff and Rivett's 'O.R. for the Manager' or some of the articles (e.g. Target, January 1966) of recent appearance.

This confusion between methods and subject is, I think, to the detriment of a subject which has a peculiar entity of its own, is still growing and is bound to attract, use and develop new methods. It is significant that though in the introductory chapter this choice is touched upon the subsequent bibliography names only books devoted to methods so that even the further reading recommended will not correct this wrong impression.

The truth is that the exercise of control, the marshalling of resources of 'men, money, machines and materials' which goes on in society today, whether a capitalist or socialist society, does require research into particular situations and processes and that the results of such research require methods of analysis involving mathematics for their interpretation and application. But it is also true that the objective of the research is to enable a decision to

be taken, a planning decision, and the scope of the research that must be undertaken to enable this decision is not discussed in this book. Even the use of decision functions, here taken as expected values of utilities or values, gets only a short paragraph in a short chapter on statistical methods.

Nearly one half of the book is devoted to Linear Programming, a subject which might be expected to have special attractions for economists. This is a good chapter but the real method and the real meaning of the solutions is bound to be lost in the detail of the iterative methods used to obtain a solution. Now that there are many computer programmes which will perform the search for solutions, students, economists and others would do better to concentrate on the manner of the search, the meaning of the solution and of the solution of the dual problem. The graphical method which is given in the first paragraph of Chapter 3, though necessarily limited to two dimensions, will do all this.

While the author is to be commended for introducing to his country a useful summary of the methods of a subject which has been so successfully developed here one many wonder why it should be re-exported in the form of a translation. A teacher would need to supplement it in several respects. For example statistical methods are dealt with in a chapter of only 19 pages out of the total 286.

The six chapters are entitled 1. Introduction; 2. Applications of differential calculus (5 pp.); 3. Linear Programming (132 pp.); 4. Probabilistic methods (stocks and queues) (50 pp.); 5. Theory of Games (23 pp.); 6. Statistical Methods (19 pp.); 7. Dynamic Programming (18 pp.); 8. Conclusions (10 pp.). There are bibliographies at the end of each chapter mostly to publications in languages other than English. There are subject and name indexes.

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DEVELOPMENT & ECONOMICS

Management Sciences in the Emerging Nations. Ed. by NORMAN N. BARISH and MICHEL VERHULST, Pergamon Press, 1965, Pp. 261, 638.)

Planning and the Execution of Economic Development. By Louis J. Walinsky, McGraw-Hill, 1963, 608.

The content of the first of these volumes is taken primarily from papers presented at a symposium organized in Brussels in 1961 by the College on Managerial Economics of the Institute of Managerial Sciences on relating techniques of management science to the needs of newly emerging nations. Three of the fourteen chapters by distinguished contributors from the United

States, the Netherlands, France and Spain are in French. This is a pity. M. Sousbie's description of experience with stimulation models and M. Crouzet's thoughts on the macro-economic development of former French West Africa were certainly worth translating for English-speaking readers.

J. Fred Weston from Los Angeles opens the book with a piece which sensibly follows Chenery's analysis of the growth of Gross National Product by sectors in various countries and goes on to make valuable comments on patterns of production at various stages of economic development. Perhaps he relies over much on Rostow's five stages of economic growth, an analysis which any businessman dealing with under-developed countries would surely take in his stride. General chapters written by Michel Verhulst and by A. T. Materna and R. D. Archibald deal with the application of operations research to planning on the national and sectoral level. Michel Verhulst in a discussion on simulation models raises the problem of criteria for project selection. Should maximum utilization of abundant factors or should the fastest paying projects be preferred? A decision on this is certainly a necessary preliminary to any planning.

Verhulst lists a few areas in which operations research is invaluable — in location of factories, in scheduling operations, in inventory control and so on. Materna and Archibald describe the Hughes-Pert system for network integration. They argue that in underdeveloped countries Pert systems may fall down not merely through insufficiency of data but also through inexperience of the working capabilities of the native work force and other similar factors. Likewise attempts to apply Pert to a complete government investment programme may founder if methods of financing turn out to be unreliable. However, they think that a previous Pert analysis for major projects should become the rule and in addition that if a major programme has some basic constraints in the shape of a limited skilled labout force or working capital, planners must attempt to integrate projects as well as possible in order to maximize their use. M. Crouzet puts some of the case for government intervention in under-developed countries and makes the point, which others tend to ignore, that methods of improving the profitability of an enterprise are worth little unless they have diffused effects on the growth of the economy as a whole.

In Part II of the book dealing with Resource Allocation Decision, Norman Barish rehearses some of the additional risks facing investors in developing countries — lack of skills, difficulties of forecasting, political conditions, etc. — and calls upon governments to invest their resources in areas which will most reduce the risks for other investors. Other chapters in this section are by Joel Dean on Industrialization Incentives, in which he points out a little optimistically the attractiveness to investors of accelerated depreciation provisions; by William J. Platt on educational policy which holds out hope

of methods of leading investment in education to its most profitable sector; and by Lechet and Flagle on the application of operations research to leprosy control.

Part III, which describes the practical use of management sciences, is disappointing. J. G. Waardenburg is exceptional in a paper on China describing practical methods which have solved some very practical problems. Sebastian Littauer outlines his experience in spreading the knowledge of management science techniques in three countries. Unfortunately he does not tell us which countries they are. A. Serra Ramoneda rounds off the book by summarizing what he believes to be the main difficulties in applying modern techniques in emerging countries — excessively large work force, lack of competition, management too involved in politics — while Edward Marcus takes the bull by the horns and suggests, for West Africa, higher capital output ratios, higher profits for investors and a firm break between town and country.

In many ways the second volume reviewed here makes a good companion for the first. Mr. Walinsky's is aimed at policy makers also but it starts at a more basic level. It describes many of the problems and pitfalls to be faced in under developed countries before sophisticated management techniques can be used at all. Mr. Walinsky has a wealth of experience of various countries and he attempts to uncover the common difficulties facing them all. He has scant respect for the ability of government to run industrial enterprises and industrial development banks and his generalizations may well misrepresent the position of individual countries. But he recognizes that where private investors are unwilling to step in governments must act and emphasizes the importance of giving potential suppliers of capital guarantees of compensation in the event of nationalization and assurances that profit remittances will not be obstructed.

Indeed, there is very little that Walinsky does not find room to mention in his book. He is concerned with the organization and staffing of planning offices, and with the choice of goals in economic development. Should higher output per head be the main object? Or should it be accompanied by reforms in education and health, and to what extent? Should there be new investment, or should the initial aim be to make better use of existing capacity? Clarity and consistency, he thinks should be there from the start, for, as international agencies continually complain, there is less a dearth of projects in underdeveloped areas than a dearth of those which are well thought out and which therefore stand a reasonable chance of success.

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MANPOWER DEVELOPMENT

Manpower Development. By ELIAS H. PORTER. (Harper & Row, 1964, Pp. xiii + 138. 378.).

In describing an investigation in which he took part, the author remarks that 'It was fun and was exciting, but not very good science'. It seems to the reviewer that this is a fair description of the book as a whole. The studies described must have been exciting, are fun to read about, and are discussed with shrewd common sense, if without profound scientific insight. Probably the author is right in suggesting that the necessary apparatus of scientific theory for a complete understanding does not yet exist. In any case, he is to be praised for writing with verve, and without any of the pompous jargon which mars so many psychological publications.

His subject is how to improve the performance of working teams. The examples he deals with include radar surveillance centres, a mail order firm, and fire-fighting organizations. In all cases he advocates a general procedure, for which he makes large, if not very precise claims. In outline, this procedure is as follows. A prepared simulated problem, arranged to be fairly typical of a real 'heavy load' case, is presented to the team. (In jargon: a known input is fed into the system). Arrangements are made to record exactly what each team-member does; and the overall performance of the team (e.g. in the radar control problem, the number and times of successful and unsuccessful interceptions) is measured. All this information is then presented to the team, without comment, and the team itself thrashes out its own errors — individual and collective — and devises improved procedures where necessary. This, in effect, combines the well-known and thoroughly validated principle of giving knowledge of results to learners, with the equally well-known and highly controversial technique of group therapy.

The idea of training the team as a whole is an interesting one and the author presents a case for its general use. Any manager or personnel officer who reads this book will be entertained; many will find it stimulating; some may put its ideas to profitable use.

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