

The "Human Relations Program" within Michigan's Survey Research Center has been carrying out a series of studies on organizational effectiveness. These studies have chiefly revolved around questions of employee satisfactions, morale, character of supervision, and productivity. Miss Morse's book is a major contribution to this continuing research program.

The central concerns of this study revolve around the characteristics in the work situation that lead or do not lead to work satisfactions. A large number of specific variables are examined within the general categories of financial returns, job prestige, intrinsic job satisfactions, involvement in the company, pride in the work group, and character of supervision. Other variables relate to such "objective" characteristics of the respondents as age, sex, education, and length of service, and such "subjective" characteristics as need and aspiration levels. The whole is cast within an explicit theoretical framework that attempts to specify the general relationship between motivation and environmentally-derived satisfactions.

A part of the use made of the theoretical scheme is an explanation of the circumstance that this study, like others in the series and outside it, finds no necessary relationship between morale and productivity. If work satisfactions and productivity are both tests of organizational effectiveness, much further research and constructive theorizing will be required to determine the conditions for their joint accomplishment. These conditions are likely to involve the character of training and selection as well as organizational variables as such.

Although neither space nor my competence allows a detailed discussion of the issues, I am not altogether happy about the conceptual distinction between "satisfactions" and "motivation," nor the uses to which the distinction is put in formal theoretical statement and interpretation of data. Levels of satisfaction are obviously a function of aspirations as well as fulfillments. The use of other language ("tension-reduction" and "potential energy expenditure") is not necessarily helpful in finding objective indicators of aspirations

or expectations, which, among other things such as cognitive perceptions, would be necessary to predict how individuals will respond to the same environmental circumstances. In short, I wonder if the rather formal theoretical sections say much beyond the following: the degree of satisfaction workers will report about their work situations will depend on what they think they are getting out of it but also on what they want to get out of it; whether a worker will be productive or not depends on whether it serves his balanced interests to be so.

This study is a technical research report with few concessions to the general reader. The exposition is consistently clear and coherent, however, and the summaries largely nontechnical.

WILBERT E. MOORE

Princeton University

TORFF, SELWYN H. *Collective Bargaining: Negotiations and Agreements*. Pp. ix, 323. New York: McGraw-Hill Book Company, 1953. \$5.50.

The author, a university lecturer in industrial management, attributes an extensive background of experience and other assistance on the book to the Chicago consulting firm in which he is an associate.

The book contains little documentation or case material except a number of useful citations to National Labor Relations Board and court cases in connection with points discussed in the text. It will serve as an up-to-date briefing for practitioners in industrial relations; and, because it helps to see perspectives in the larger picture, it will also find use in various training programs.

The nineteen chapters are grouped into four major parts. In Part Two ("non-economic" issues), Chapter 7 on no-strike clauses and Chapter 9 on management rights seem particularly useful. "To the employer in a unionized plant," says Mr. Torff, "the no-strike clause is probably the most significant provision of the collective bargaining agreement to which it is a party. . . . Virtually every [such] agreement is a series of concessions from the employer to the union and the employees. The only real concession running from the union and

the employees to the employer . . . is the pledge . . . to refrain from strikes, slow-downs . . . during the life of the agreement." A number of (unidentified) specimen no-strike clauses are discussed, as well as sanctions available through legal and other channels. The matter on disciplinary actions for infractions of such agreements contains some sound and important generalizations, including the assertion that union stewards and officials "are charged with a higher degree of responsibility than rank-and-file union members" for preventing violation of this part of their contract.

A short chapter suffices for management rights clauses, which are held not analogous to the no-strike agreement since management retains the residue of rights not bargained away explicitly in its agreement with the union. (More might well be said on past practice in the plant, as additional evidence of management concessions to workers.) The usefulness of a management rights clause as a reminder to union members is briefly set forth, together with a warning against language suggesting that management has only the rights explicitly enumerated in the clause.

Part Three, on "economic" issues, is naturally much concerned with numerous aspects of wages. A very brief treatment is included of that hardy perennial source of disputes, alleged misclassification of specified employees; and somewhat more is given on bargained-out job descriptions and evaluations. Unions will find some support here for severance pay and guaranteed wages and employment.

Part Four, on administration of agreements, deals first with grievance procedure, then, in the concluding chapter, with arbitration. The legal aspects and history are rehearsed at some length; and it is explained that voluntary settlements are usually preferable to litigation—also why the union is almost always the complainant in grievance procedure, including arbitration. Agencies assisting in selection of arbitrators are mentioned; but the National Academy of Arbitrators and publishers of arbitration decisions may feel aggrieved by omission of reference to them.

Z. CLARK DICKINSON
University of Michigan

CLOW, ARCHIBALD, and NAN L. CLOW. *The Chemical Revolution*. Pp. xiv, 680. New York: British Book Centre (and The Batchworth Press, London), 1953. \$10.00.

This book, in manuscript, earned the Senior Hume-Brown Prize from the University of Edinburgh. The purpose of its authors has been "to create something new out of hitherto unexplored ground common to economic history and chemical technology." The 25 chapters include such important developments as the Economy of Common Salt, Soap, Vitriol, Calico Printing, Glass, Pottery, and the Fermentation Industries. There are 110 illustrations, 16 diagrams, a Glossary of Dead Chemical Language, a Chemical Chronology from 1610 to 1856, the period covered in the book, 28 pages of bibliography, and a full index.

The authors have not only examined a huge volume of source material but have digested it with understanding. The reviewer, a chemist (in the American sense), can find no fault in the treatment of the technology. Social consequences, such as shifts in population, occupation, and domestic life, are constantly pointed out, but without any evidence of purpose to bend them to the support of a particular social theory.

For example, we read of the effects of deforestation resulting from the dependence upon wood of "eotechnic" industries, including the production of iron, salt, soda, saltpeter, gunpowder, soap, sugar, pottery, lime, and many others; and of the effects of the large scale production of soap after Chevreul, early in the nineteenth century, had elucidated the nature of composition of fats and the chemistry of their saponification.

The final chapter, on "Social Personnel," gives an account of the men and societies mainly responsible for the advances in chemistry which laid a large part of the foundation for the Industrial Revolution.

The authors of this book have brilliantly succeeded in the task they set for themselves.

JOEL H. HILDEBRAND
University of California
Berkeley