Productivity and Social Organization: The Ahmedabad Experiment. By A. K. Rice. (Pp. xiii + 298. 35s.) London: Tavistock Publications. 1958.

For some years now there has been a steady flow of literature from the staff of the Tavistock Institute of Human Relations concerned with the sociology or social psychology of industry. Unfortunately, much of it has been very difficult to read or digest because the language used has tended to obstruct rather than facilitate the exchange of ideas. Mr. Rice's book goes a long way to make amends.

The book describes three experiments carried out in mills of the Ahmedabad Manufacturing and Calico Printing Company Ltd. Two of the experiments may be regarded as fairly classical studies of the reorganization of groups of operatives engaged in industrial processes, *viz.*, automatic and non-automatic weaving. The third is concerned with the reorganization of management. Before the experiments are described we are given a straightforward and concise account of the theoretical background that is deemed to be important in any changing industrial community. Even those who cannot spare the time to read the details of the experiments should read those sections (part II) which set out these theoretical considerations. It is argued that overall efficiency requires not only the technologically appropriate equipment but also a sociologically satisfying works organization. The gains that may be expected to flow from technical progress may well be nullified if they produce changes that conflict with the social needs of the worker. Even organizational structures which have been long established may well be inappropriate to the workers' psychological needs. Any investigation, it is argued, must first decide what these sociological needs are and how they are to be met. The culture of different societies will influence differently the conscious and unconscious needs of the industrial worker in his work environment. It is necessary therefore that this cultural background should first be examined. Where workers are working in groups, to be socially satisfying the group and its tasks must fulfil certain conditions, for example, conditions of size, of task organization, and of the individual roles of the members in the group. The role of each individual should not extend beyond that of the group as a whole. Having set out these and other principles the course of the experiments is described.

In the first place, a careful study and job analysis was made of the existing organization, the pattern thus revealed was then compared and contrasted with the theoretical ideal. The discrepancies are pointed out together with their theoretical and practical consequences. This is followed by a description of the course of events that took place as changes were made together with comment on the theoretical implications.

In neither of the weaving experiments was success achieved without local and national difficulties. For example, after the non-automatic weaving experiment had been running for approximately four months a national campaign against "rationalization" flared up and made the position of the workers in this shed very difficult.

In the automatic weaving shed

"the first spontaneous acceptance of the new system and the subsequent determination to make it work were due primarily to the workers' intuitive acceptance of it as one which would provide them with the security and protection of small group membership which they had lost by leaving their villages and their families to enter industry. At the same time, the new system allowed them to perform their primary task effectively and thus provided them with an important source of satisfaction."

In the non-automatic shed

"the acceptance of the new system and the determination to make it work were due to its providing more opportunities for effective task performance and for the building of stable and secure small work-groups relationships than those existing in the conventional system with which the traditional norms of performance and wages were associated."

The considerable changes that took place had their repercussions on the structure of management and the creation of new managing systems is described. The informal and personal management of the past had to give way to a new system of increased specialist knowledge and greater delegation to executive managers. Once more the approach followed well-accepted patterns.

"The first task was to get a picture of the existing organization, of the reasons for its development, and of how it worked. Thereafter the overall socio-technical system of the mills was analysed and appropriate managing systems evolved, discussed, modified and finally established and manned."

In the final section of the book, "Social and Technical Change", the original concepts and assumptions are re-examined and discussed. Although the book is primarily an account of a discreet study in an Indian textile mill it is clear that this serves to illustrate much wider concepts and throw light on more universal problems. India itself is going through its own particular version of our western industrial and social revolution of the last century and a half. The problems which confront India may, it is argued, be more effectively tackled if attention is paid to the implications of social change as it affects different groups—management and worker—caste and caste—village and factory. New groupings will have to give satisfactions to replace those of the former grouping. Developing machine technology requires a works organization not only appropriate to the scientific and technological demands but also appropriate to the changing psychological needs of those who are involved in it. The satisfactions which formerly accrued to a man through what he did must be replaced by satisfaction through what his machine does. The need to recognize that technical change has its impact on social organization is important both in India, where industrialization is replacing craft and village industry, and in the west where automation is having its impact on the operator-machine relationships. HARRY G. MAULE

Ageing on the Factory Floor. By F. Le Gros Clark. Published by The Nuffield Foundation, London.

This is essentially the report of a study of ageing within the conditions of modern industry—in this case the production of domestic furniture—and some com-