CHAPTER I

INTRODUCTION

This is a sociological study of an Indian factory in a town in Gujarat. I will use the pseudonym 'Oriental' for the factory. It manufactures power-operated pumps, electric motors and switchgear equipment. In the middle of 1957, it employed nearly 900 persons of whom only ten were women. The town in which Oriental is situated has a population of over 2,90,000. The town will be called Rajnagar (also a pseudonym) in this study.

THE PROBLEM

The prevailing assumptions regarding the social implications of industrialization (by which I mean the impact of machine technology involving mass production) for what are called underdeveloped countries are the point of departure of the present study.

It has been accepted that industrialization brings in its train important changes in the institutional pattern of the society it enters. The history of the western societies before and after the Industrial Revolution therein bears ample testimony to the statement just made. See Hammond (1951), Beard (1901), Harding III (1955), Dobb (1954) and Ogburn (1922).
Now the assumption made by most writers on industrialization is that the changes which machine technology brought about in the social and cultural life of the west are bound to occur in those Asian and African countries which have more recently entered the race for industrialization. The belief underlying this assumption is that the only society and culture compatible with modern technology are the western society and culture. (Probably due to this reason the western society is alternatively called industrial society). Therefore, wherever modern technology is introduced, the western pattern of society and culture must follow. It follows from this that when modern technology is introduced into a non-western society, it comes into conflict with the existing society and culture and the resultant is the prevalence of the society and culture from which the technology is borrowed. As for India, for instance, it is often said that industrialization will change the traditional institutions in the direction of the western society — caste will be replaced by the class system, the joint family will give way to the nuclear family, the traditional group-oriented and non-rational outlook will make way for individualism and rationalism, and so on. A typical example of this contention is the study of Siehoff (1959).

This sort of deterministic relationship between technology and society is questionable. In the first place, it contains two ideal types — the western (or industrial) society and culture and the non-western (or non-industrial)
society and culture – and implies an exclusiveness between.
There may, however, be a good deal of variation among
societies and cultures representing each of the two types,
and there may also be an overlap of characteristics between
the types. Rationalism or individualism may vary from one
western society to another and there may be elements of
rationalism or individualism in some non-western societies.
For instance, the enormous growth of industrial sociology
in the west, and its particular emphasis on the problems
created by technology for the society and vice versa, have
amply demonstrated that modern technology and the western
society are not entirely compatible with each other. See
Mayo (1949), Roethlisberger and Dickson (1950), Jaques (1951),
etc. On the other hand, recent studies of caste and the
joint-family in India have sufficiently proved that the
traditional Indian society is not so non-rational and non-
individualistic as is often believed.4

Secondly, some studies of industrialization of under-
developed countries have shown that the introduction of
machine technology does not always upset the existing society
and culture. Nash (1958), for instance, has indicated that
in Guatemala technology and the non-western society made
adjustments with each other and co-existed, though there were
some initial frictions between them.

We need not go into that controversy here. However,
this much has to be admitted, that the modern machine tech-
ology unquestionably brings with it some traits, such as a
sharper division of labour, more specialization of work and skill. This fact has its social consequences. In this sense, the 'industrial society' can be distinguished from the 'non-industrial society'. Having accepted this, we may ask whether, and in what respects, the inevitable concomitants of machine technology induce changes in the society and culture of an industrializing country under observation. I wish here to make an exploration in this field.

There are two routes along which we can carry out our explorations. We may go along the route of the society that is being industrialized. Alternatively, we may go along the route of the industry or factory itself which uses the modern technology.

(1) Along the first route, an observable unit of society, say a village or a small area of a region, in the process of industrialization, may be chosen. One can then study the changes in the society occurring as a result of industrialization. For example, how does technology affect the family, caste and religion of the people under the new impact? Does participation in the new technology change or modify the values, beliefs, attitudes and social relations of the people? Such inquiries will enable us to test the validity of the assumptions regarding industrialization mentioned above.

(2) Going by the other route, one may observe how a factory functions within a larger community. Do the social and cultural affiliations of its personnel affect their
interrelations within the factory and their attitude to work? If they do, what is the nature and degree of such influence? The information collected on these lines is again bound to throw light on the assumptions mentioned above.

A reasonable answer to the question of social implications of industrialization presupposes a sufficient amount of study on both the lines. Nevertheless, in the context of a single one-man piece of research such as the present one the student has to make a choice between the two approaches. I have here chosen the second approach: studying a factory in India as it works in a given social milieu.

The terms 'factory' and 'social milieu' used in the preceding sentence are, however, both blanket terms and need to be precisely defined. Sociologically, we cannot speak of a 'representative' factory. The structure and working of factories in India differ widely according to their size, nature of production (textile mills, engineering, pharmaceuticals, etc.) and nature of ownership (private, jointly owned, state-owned etc.) - to mention only a few attributes. Similarly, India does not have a uniform social milieu - a fact which is too obvious to need demonstration. That is, firstly, there are important differences in the social background of factory-workers according to the location of factories - those in a cosmopolitan city like Bombay, in rural areas and in the heart of regional centres like Ahmedabad; in the heart of tribal areas. Secondly, while some factories are manned by single caste or regional groups, others have mixed personnel. Thirdly,
some factory populations have had a direct transition from non-industrial to industrial jobs; others had traditions of some sort of industrial work.

In view of the facts just mentioned, every study made on the proposed lines must first of all specify the "locale" of the unit of study. In the present case, the factory studied is a medium-size engineering factory owned by a public limited joint-stock company. It should, therefore, differ in its working and organization from small enterprising factories on the one hand and from large industrial undertakings on the other. It should also differ from non-engineering factories which contain different kinds of jobs and skills. Secondly, Oriental is located in a town where industrialization started towards the end of the last century, which had a tradition of non-industrial jobs and which has a socially (in terms of caste, language and religion) heterogeneous population. In this sense also, the present study cannot claim to be typical or representative of industrial sociology in India. It will be seen from the body of this essay that I have made important assumptions both as regards industry and as regards society. I would, then, reformulate the theme-question of the present study again as: Given a factory such as the Oriental, and given a social background of factory population such as that of Oriental employees, what is the relation between the two?

Conceptually, I have looked upon Oriental as a 'society' of human beings interacting and forming a network
of relationships. (The factory, in its entirety, would include those who sell raw-materials to as well as those who buy finished goods from it. I have, however, ignored these 'outer' relationships since I believe their inclusion would not make any significant difference to the argument of this study). This network of relationships can be observed with reference to their three major aspects. First, there are the formal relationships underlying the factory as a system of production and a legal association with rules and regulations operating within the legal framework of the State. Secondly, there are the informal relationships coming into being as the result of the employees working together. Thirdly, there are the already existing social relationships with which the employees enter into the first two relationships.

Each of these sets of relationships affects the others and enters into the interactions among the employees and between the employees and the employers. The values, beliefs and role-expectations of the people of the factory are the elements that make up their actions underlying the different sets of relations. The task before us, therefore, is to observe and isolate these elements in order to understand the factory as a system of relationships, i.e. as a social system or 'society'.

Accordingly, this study falls into three divisions. I will first describe the formal relationships in Oriental and broadly point out the norms and ideas on which they
subsist. I will call this set of relationships as the formal system of the factory. Secondly, I will describe the linguistic, caste and kinship affiliations among the employees. These are the "already existing social relationships" mentioned above. I will use the term 'institutional system' for this set of relationships. Here I will show that the employees' beliefs, attitudes and role-expectations in respect of their membership in the formal system are coloured by their membership in the institutional system. Thirdly, I will describe the informal relationships among employees and the forces which sustain these relationships, making up what we can call the "informal system" of the factory. These informal relationships will again be shown as influencing the employees' beliefs, attitudes and role-expectations as members of the formal system.

In the end, I will describe the working of the trade union among Oriental workers and show how the three systems of relationships just mentioned influenced trade unionism in the factory.

THE METHOD

It is necessary at the outset to give a brief genesis of the present study, lest the reader should progressively build up the impression that the title of the thesis bears hardly any relation to its contents. When I first thought of undertaking this study in the middle of 1956 on a suggestion by my teacher, we had primarily in mind the fact that although
social scientists had an image of the social background of industrial labour in India, there was complete lack of ethnographic data on which to base even a tentative hypothesis. There was thus a point, it was felt, in studying the social history of modern industry, especially, the social background of industrial workers, in a city like Rajnagar which had ample potentialities to develop industrially.

With this aim, I first carried out a general survey of the major factories in Rajnagar. The information collected therein pertained to the history of each factory, the strength of its work-force, the major social groups among its personnel, the welfare measures adopted by the management, etc. [Questionnaire (abridged) as Appendix]. I hoped I would be able, on the basis of this preliminary data, to select one or two representative factories and study them intensively.

However, this preliminary survey met with very poor success. Though I tried my best to convince the employers of the 'academic' character of my work, most of them showed a clear disgust and suspicion for the type of work I intended to do. All of them thought of the non-utilitarian character of my work and hence regarded cooperation with me as so much waste of time. I could collect some information from sixteen factories in a period of four months! This taught me two important lessons: (1) It was futile to search for a 'representative' factory in Rajnagar. Factories differed
widely as to the nature of jobs, modernisation of jobs and machines, the social and cultural groups and other factors. (2) It would not be possible for me to choose a factory for intensive study due to the hostility shown by employers.

In the meanwhile, I had secured, through my teacher, the permission of the Managing Director of Oriental to study the factory. Owing to his many and varied contacts with academic people, this Managing Director knew a good deal about the implications of social research and was also aware that he could not expect any direct fruits from a piece of research such as mine. On the other hand, since I was introduced to him by my teacher who was in an intimate contact with him, he had, without an explicit asking, a full guarantee that I would stick to my academic business and would cause absolutely no trouble in the administration of the factory.

I decided therefore to stick to Oriental for the present work. Fortunately I soon found that in Oriental I was in fact studying a typically 'modern' Indian factory. The employees and even outsiders considered the Management of Oriental as one of the most enlightened in this region. They were always ready to introduce new things and ideas in the factory and were enthusiastically working to develop the factory in many spheres. They had modern machinery and used modern methods and techniques of production. Good welfare amenities were provided to employees, and there were attractive incentive schemes which raised the earnings of
workers in proportion to their work-output. Moreover, the relations between the Management and workers were quite cordial, and to some extent, they were proud of each other. Oriental was by no means a 'problem case'.

The immediate result of confining my study to a single factory was a change in the conceptual orientation of the problem. Instead of collecting ethnographic data about industrial workers, I started looking at the factory as a system of relationships among its personnel, their social background being just one aspect of the system. I then decided to explore Oriental as a social system and make an attempt to understand how the different aspects of relationships therein influenced each other.

I first collected the preliminary information - such as the number of employees, their division into various cadres and work-units, the history of the factory, its present organization etc. - from the factory registers and information handouts published by the management from time to time. Then, for nearly four months I moved through the various parts of the factory. I met employees of all cadres and in all divisions, talking freely with them, sometimes at the places of work, sometimes outside work-places - either in the canteen or near the workshop and office buildings while they were just having a respite from work. This yielded valuable information about the informal and institutional groupings in the factory, about how employees looked at their work and at other people in the factory - their
superiors, equals and subordinates. The free-lance movement
in the factory helped me gain a 'feel' of Oriental - I learnt
a lot about the production system, as also about the factory-
men's experiences of work.

Till then, I had no systematic information about the
social background of Oriental employees. It was not practi-
cable to collect such an information about all the persons
working in the factory. I therefore decided to take a sample.
I selected 238 employees (29% of the total working force of
810) for a formal interview. In the selection, I did not
stick to the rigours of sampling adopted in statistics;
nevertheless I picked up the interviewees in such a way
that the different workshops and departments, different
cadres of employees, and different linguistic, caste and
informal groups were fairly well-represented. I drew up a
small questionnaire including questions on the caste, family,
occupational and educational background of the employee and
his present social commitments such as family responsibili-
ties, need for remaining absent in the factory and so on. In
all the interviews I kept in mind the essential points
regarding the employee's social background on which inform-
ation had to be elicited; but the interviews were all
informal and loosely guided. There was no fixed beginning
or end. I would just start talking with the employee on a
point that interested him - his relations with his boss, or
his views about the government, or his impending departure
for his native place or whether he saw a particular movie
currently being shown in the town. Sometimes my interviewee interviewed me fully before allowing me to know anything about himself. Though a few interviews turned out to be sterile, on the whole I could collect very useful information, not only about the social background of the employees, but also about the working of the factory, about informal relationships among employees and about their attitude to their work. The interviews therefore added a great deal to the information I had collected during the four months mentioned above. I should believe that my success with the interviews was at least partly due to the fact that most of the interviewees knew me well when being interviewed, since they had talked with me before the interviews.

After these interviews, I again spent some three months in the factory. During this time I mixed with the employees in formal and informal situations, but I utilized a part of the period in observing rather deeply the behaviour of employees in three small sections - the core section in the Foundry, the winding section in the Electric Shop and the oil-immersed contactors section in the Switchgear Shop. This gave me a somewhat deeper understanding of the informal bonds existing among employees working in small work-units.

Subsequently, I collected factual information about some past events and conditions of the factory - strikes and slowdowns, wage structures, absenteeism and labour turnover, trade unionism, etc. - from the old records of Oriental. This work had to be done in the factory premises, which once
again gave me an opportunity to mix with employees and know more about them. The data regarding trade union were collected from some records of trade union offices in Rajnagar and by talks with trade union leaders.

Although I got quite good cooperation in my work from all sections of Oriental, I had to encounter a good lot of difficulty - at times amounting to hostility - in the course of my fieldwork. I will describe it here, mainly because it has been partly responsible for giving this study the shape appearing in the following pages.

As I have already mentioned, the Managing Director, who was the virtual owner of Oriental for the employees, had promised to give me adequate facilities and cooperation for my study. He permitted me to move in the factory as I liked and asked the Workshop Superintendent to make the necessary arrangements for my work. The latter was always helpful and cooperative. He issued general instructions to all heads of workshops and departments to extend cooperation to me. As far as possible, I met the different sectional heads and tried to convince them of the purely academic nature of my work. I also distributed among employees printed pamphlets explaining the nature of my work and its harmlessness for all concerned. However, while some employees liked the idea of my study and some others showed a lukewarm attitude, quite a few of them were antagonistic to such a work.

This antagonism was very embarrassing to me in the initial stages. Sometimes I passed whole days in the factory...
without getting any significant information. On two occasions I made serious mistakes owing to my ignorance about the administration; I approached workers in two workshops without the formal permission of their heads since I laboured under the belief that the permission from the Managing Director was enough. Most of this initial friction died down as the employees got more familiar with my work and me. However, some antagonism and misconceptions continued till the end of my fieldwork.

With the passage of time and an increasing understanding of the factory on my part, I realized that the antagonism and suspicion against me were a part of the system which I was studying. Let me give the bases of the different attitudes of Oriental employees towards me.

Some officers thought that my work was a complete waste of time. They were completely preoccupied with their technical or administrative problems and thought that sociological research is useless because it does not solve any of their day-to-day problems. When I requested an officer to spare some time for me, he told his neighbour:

"Look, this student of psychology (for him it made little difference from sociology) has come to our factory because there is a vacation in his college. He now wants to waste our time by talking with us. He does not know how busy we are!"

A few other officers misunderstood sociology as either socialism or social welfare and thought I was working to
inculcate an ideology into the workers of Oriental. On the other hand, some workers always looked upon me as a person deputed by the Management to gather information about them in a guise, in order to raise their work or to cut down their earnings. These employees either feared or entertained suspicion regarding me and avoided me as far as they could. Some workers avoided me because they thought by associating with me they might lose the goodwill of their officers. Some employees regarded my research as just a manifestation of the Managing Director's urge to introduce new things in the factory. "You know, he has a sort of hobby to introduce new things into Oriental, from whatever source they come, whether useful or useless."

A clerk showed his disgust towards my work by twisting the meaning of Ph.D. (the degree for which I was working) as Personal History Department. He said my only business was to 'interfere' in the private life of the employees. A few officers and clerks held such a belief.

Others tried to locate me somewhere in the formal set-up of Oriental. To them, a man working in Oriental must belong to a workshop or an office department. I was misunderstood by some as an engineer or as a clerk for quite some time. Some thought I was an apprentice from the technological college of the University. When these employees found that I did not do any 'work' but moved here and there and gossiped with all sorts of employees, they thought I was just enjoying a holiday in Oriental at the cost of the
University. Some workers said they envied my 'easy-going' life.

Those workers who were in frequent contacts with the trade union and with the outside world through newspapers considered my work as essentially meant for their own welfare. They thought I would ultimately show up the weaknesses of the management and improve the lot of workers. These workers well cooperated in my work, but they tried to project their image of industrial employers on the research. For instance, a worker said:

"It is all very well. You are doing good work which may benefit us in the long run. But you don't know our employers' tactics! You will now write down your report and publish it. But I am sure that if your book contains anything against the interests of the employers, they will buy out all the copies of your book and check others from reading it. And they are so rich that they can buy any number of copies that you print... All your labour will then prove futile."

Such suspicions and doubts lingered on and in some cases I had no way of clearing them; I had then to accept them as part of the game, or rather as its unavoidable conditions. However, in a sense some of these experiences were a blessing in disguise. As I encountered employees projecting their attitudes to others and their understanding of the working of the factory on me, I had opportunities to work backwards and find out the employees' attitudes and
understandings from their comments on my work.

Nevertheless, a few bitter experiences with officers and workers made me somewhat shy and overcautious in my dealings with the employees. This might have kept some valuable pieces of information out of my reach. For instance, there were a few important informal groups among staff members and workers. I got some information about them from indirect sources, but could never get into them myself. And I am sure a deeper knowledge about them would have made this study much richer than it is. A careful reader will also find out that at a number of places in the following pages the information given or the observations made are hazy and more or less incomplete. I may mention here that in most cases I am aware of the 'naivette' of my statements but have been unable to avoid it owing to the odds against which I had to work. I am presenting this study for whatever it may be worth; for the large part it has been a groping in the dark. There were, of course, factory-studies conducted in the west, particularly those of Roethlisberger and Dickson (1950), Gouldner (1955), Jaques (1951) and Warner and Low (1947). These studies did help me in forming my concepts and taught me a few good lessons about my approach to the problem. By and large, however, they hardly served as precedents for any part of my work. Their problems, orientations and fields were all very different.

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In the following pages, I have used the past tense,
partly because Oriental has changed radically since I gathered data, and partly for the sake of uniformity.

NOTES

1. The information presented here was collected during a total period of about twelve months between July 1956 and July 1958. Most of the statistical data I give pertain to the middle of 1957 because I did the core of my fieldwork at that time. I use the past tense throughout this essay because the factory under reference has changed significantly since I left it.

2. This figure is approximate, since numbers in a factory fluctuate almost from day to day.

3. See Neale (1956). Similar ideas were sounded by a participant at the Seminar on Industrialization and Industrial Man held in Delhi in January 1959 under the auspices of the Institute for Research in Economic and Social Growth, Delhi.


5. It must be remembered that such an attitude on the part of industrial employers and managements is not peculiar to Rajnagar nor even to newly industrializing countries. Similar attitudes are reported by social scientists in the west where both industry and social research are familiar phenomena for all. For instance, Smith
(Br. Journal Soc., June 1960) writes: One result of this identification with the more controversial researches has been prejudice in industry against social research and analysis: sometimes on the grounds that it is biased in favour of one set of interests in the established pattern of industrial conflict, sometimes on the grounds that it ignores the facts of industrial conflict altogether, and sometimes on the grounds only too familiar to frustrated research workers - that to allow such research might 'cause trouble'.

6. This figure excludes casually employed workers as well as those workers who were employed through labour contractors. The Oriental employers did not have any obligations in respect of these workers.