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The Utilization of the Literature of Industrial Sociology in Teaching the Papal Social Encyclicals

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THE UTILIZATION OF THE LITERATURE OF INDUSTRIAL
SOCIOLOGY IN TEACHING THE PAPAL
SOCIAL ENCYCICALS

by

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CHAPTER I

INTRODUCTION

College students, many of whom are coming into contact with the papal social encyclicals for the first time, often tend to regard them as "vague," "unrealistic," "impractical," and "idealistic." Such students seem to regard the thought of the encyclicals as something far removed from reality, conceived in a religious vacuum and elaborated in a context which does not coincide with the workaday world of social and industrial relations. It is widely recognized that much of the difficulty here described is due to the fact that the papal encyclicals of necessity are couched in terms broad enough that they can be applied to extremely diverse circumstances.

One problem, then, in teaching the encyclicals is to make the specific application to the American scene of the broad principles and generalizations contained therein. A widely recognized method of breathing life into the statements in the encyclicals is the use of economic data taken from the American scene. Thus figures on corporation ownership and
control, statistics on the role of the corporation in modern industrial life, figures on the distribution of wealth in the United States are frequently employed with good effect. The use of such material is designed to clothe principles with the flesh and blood of reality or to indicate the accuracy of semi-historical statements.

This use of data from economics is valuable in the extreme, particularly in view of the fact that most students seem to be unfamiliar with what might be called the facts of life in the complex world of modern industry. Valuable as this approach is, however, it by no means exhausts the possibilities. As soon as one departs from such specific subjects as ownership of private property, the just wage, or the concept of the family wage, the student once again is likely to feel that all else is "pure theory." The concept of the family wage, for example, is a relatively simple one to grasp. If the student accepts the ethical arguments involved, study of the actual wage levels will be sufficient to show him that millions of workers in the United States do not now receive a family wage. The problem as the student sees it is then a relatively clear-cut one; the task is obvious, that of raising the wage level.

Leaving the student with this conviction certainly is an accomplishment, but the fact remains that the concept of the family wage is only one idea in the encyclicals, and im-
important as it may be, it is still not the most important idea. What the social encyclicals, especially Quadragesimo Anno, envision is a profound reorganization of the social economy, something that goes much deeper than any question of wage levels alone. In this sense, one may distinguish two levels in the social encyclicals, that of the immediate remedial reforms and of the long-range reconstruction, although in practice these may be intimately connected.

Important as they may be, such matters as limitations of the hours of work and the right to a living wage are still of lesser importance than, for example, the establishment of the vocational group system, usually referred to in American circles as the Industry Council System. Once one gets outside of what might be called the dollars and cents area, the rapidly developing literature of industrial sociology can provide material of great help to the teacher of the papal encyclicals.

It is worth noting here that neither the use of economic data nor the employment of materials from the field of industrial sociology represents an attempt to "prove" the ethical statements in the encyclicals with materials from lesser disciplines. Such an attempt would be clearly invalid. Rather the purpose of the thesis is to indicate findings or areas of concentration which tend to illustrate points raised in the encyclicals or to give additional, even if lesser, support to
arguments already advanced in support of encyclical principles by philosophy or theology.

Similarly, the purpose of the thesis is not to summarize the findings of industrial sociology. Such a task would be a monumental one which would amount to a complete textbook in the field and is well beyond the scope of this thesis. The examples used will not necessarily be the only ones that could have been used, nor is it claimed that every contribution industrial sociology could make is explored here. Rather the purpose of the thesis is simply to indicate that in the materials commonly described as industrial sociology there awaits a wealth of material for those who wish to make the social encyclicals take on more concrete meaning for their students.
CHAPTER II

THE NATURE AND SCOPE OF INDUSTRIAL SOCIOLOGY

As Father Kerins has pointed out, 1 sociologists have long been concerned with the impact of our industrial civilization upon the social processes. Le Play pioneered in this field with his analyses of the transition from an agricultural society to an industrial one. The evidence he discovered indicated a substantial amount of social disorganization, marked by loss of effective communication and cooperation between groups as a result of the developing industrial society. Decades later Durkheim was concerned with the theory that technological advance spelled a decline in social unity.

Men like Max Weber, Pareto, Thorstein Veblen, and many others in addition to Le Play and Durkheim have devoted major attention to creating sociological theory aimed at the understanding of economic and social processes. Whatever the considerable differences in the theories, methods and conclusions of

these men, of one valuable fact there is no doubt: industrial life changed the old social order, intensified old problems and created new ones.

The concentration that has come to be called industrial sociology or a sociology of economic organization, therefore, is actually an application of an accepted focus of interest inside sociological theory, rather than any completely new development. One of the most primary concepts in sociology, for instance, is that of "community." Although the term "community" is often given a geographical significance, it may in a more fundamental sense be used to describe any area of common interest. Thus even in an early work in which he stresses the geographical aspect, MacIver says: "Wherever any group, small or large, live together in such a way that they share, not this or that particular interest, but the basic conditions of a common life, we call that group a community."2

A recent textbook offers this definition:

The essential definition of group which we offered may be applied to the community, namely, "a number of people in definable and persisting interaction directed toward common goals and using agreed-upon means."3


3 John W. Bennett and Melvin M. Tumin, Social Life, New York, 1948, 164
Following this approach, Mary van Kleek of the Russell Sage Foundation describes the industrial community as the whole area of society's common interest in production, including agriculture and mining, as well as manufacturing and mechanical industries, the productive forces used in all these processes, and the services, such as transportation and communication, which result in making products available for ultimate consumption.4

This description of the industrial community makes clear that one of the delicate points in the theory of industrial sociology involves the question of relationship with economics. Present work in industrial sociology abandons the idea that each of the social sciences should mark off for its own a special domain and regard any encroachment on its borders as illicit trespass. This jealous approach, which has been an influential one in the history of economics and of sociology, would make industrial organization and management, labor relations, the institutional direction of economic action and the like the exclusive preserves of economic analysis. To sociology would be left only the social problems, often on an individual basis, which result from economic dislocations of one sort or another.

The industrial sociologist, in contrast to this view, is committed to an analysis of phenomena in economic activity in

terms of genuinely sociological conceptual schemes. As Wilbert E. Moore puts it:

A sociology of economic organization is only incidentally an analysis of the social origins of economic science, or a treatise on the social organization of professional economists ... we are concerned with an assessment of the facts and principles in sociology which impinge on the subject matter studied by economists, and more particularly in appraising the development of a sociological theory of economic action and economic organization.5

It is a platitude to say that our technological advances in the field of production have far surpassed our skill in the analysis and the organization of social skills. Platitude though it be, however, this statement is of vital importance. An important need of our time is for a sociology of production, an organized body of knowledge which will bring to bear on the world of production the sociological analysis employed elsewhere with success, utilizing as tools such concepts as society, community, role, status, primary group and the like.

To an increasing extent, industrial factors strongly influence other aspects of social relationships, and it is becoming increasingly impossible to ignore the impact of productive forces upon social conditions. It is ever becoming more obvious that a valid theory of society can never be obtained

today unless sufficient weight is given to the industrial community as a vital factor in modern life. This industrial sociology tries to do. In the words of Mary van Kleek, industrial sociology can be defined in the following terms: "An industrial sociology signifies the body of knowledge which would record and organize experience in human association in the industrial community."\(^6\)

A recent textbook in industrial sociology puts the matter this way:

Among other things sociology studies group behavior, status positions, and roles that individuals play in groups. Industrial sociology merely applies the methods and concepts of general sociology to the field of work relations. The field of industrial sociology may be conveniently defined as the study of: (1) work groups and work relations, (2) the role the worker plays in work groups, and (3) the social organization of work plant society.\(^7\)

Despite the fact that sociologists like Le Play, Durkheim, Weber and the rest have long been concerned with the impact of economic organization upon social processes, what we have come to call industrial sociology is usually credited with a comparatively recent birth as such. Although early work of

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\(^7\) Delbert C. Miller and William H. Form, *Industrial Sociology*, New York, 1951, 16
Ogburn on the social importance of technology was very important, as well as studies done by the industrial research branch of the Department of Industrial Studies of the Russell Sage Foundation, industrial sociology is generally dated from the famous Hawthorne experiments, done in the Hawthorne works of Western Electric in Chicago beginning in 1924.

From a project which aimed to discover the relationship between illumination and productivity, the Western Electric researchers may be said to have stumbled onto some idea of the importance of social environment as opposed to purely physical conditions. From the Hawthorne research projects have come the now famous studies of such men as Elton Mayo, F. J. Roethlisberger, T. N. Whitehead and many others associated with Mayo in the Graduate School of Business Administration at Harvard.

It is interesting to note that in 1924 the Hawthorne researchers cannot be described as sociologists. So provocative for sociologists were the findings of the researchers, however, that more and more sociologists in recent years have taken up the challenge. Thus Warner and his associates at the University of Chicago, especially in their Yankee City Series have contributed much in the way of a sociological conceptual framework that was lacking in the original work at Hawthorne. Today the

8 See bibliography
pioneer sociologists in industrial sociology must be heartened by the number of universities which carry courses in their curricula on the subject. So great has the interest become that in 1946 the American Sociological Society found it worthwhile to establish a separate section devoted to industrial sociology, a good indication of the growing importance of this concentration inside of sociology.

At the same time, severe criticism of the work that has already been done in the field of industrial sociology has not been lacking. It is true that in much of the existing work there tends to be a lack of rigid definition of the boundaries of the area to be covered and of any very precise formulation of the best methods to be employed. At the present stage of its development what has come to be called industrial sociology frequently seems to be a combination of industrial practice, drawn from what is often described as "the human relations approach to industry," and of sociological theory applied to the industrial scene.

Perhaps this two-fold character of the material in the field is one of the reasons Father Kerins suggests that a careful distinction be made between "industrial sociology" and "a soc-

9 See Chapter VIII
iology of industry."10 The first term would be used to describe those studies which have as their immediate ends increased productivity, industrial peace or something of a similar nature; the expression "sociology of industry" would be used to cover analyses of the social structure of industry, the processes inside work groups and the like.

This distinction made by Father Kerins seems to the present writer quite valid and a very useful one for very many studies. For the purposes of this thesis, however, this distinction seems unnecessary, and throughout the study the terms "industrial sociology" and "a sociology of industry" will be used interchangeably.

CHAPTER III

INDUSTRY AS A SOCIAL SYSTEM

One of the most important preliminary concepts in industrial sociology is an extremely simple one. That is the concept of the factory as a social system. Despite its apparent simplicity, this idea alone has positive value for the teacher of the encyclicals. The prevailing climate of opinion in America is largely that of economic liberalism. An example of this type of thinking is the tendency to atomize society, especially where economic activities are concerned. In such a view the citizen of the industrial system is an isolated economic man, the homo economicus of classical economics, operating strictly on an individual basis for his own self-interest, conceived in strictly economic terms. Even without specific formulation, the place of work is thought of as populated by these economic abstractions and if the paramount fact of social interaction is considered at all, it is left for study strictly outside the work situation. As Roethlisberger puts it, "Too frequently the human activities of industry are conceived of as essentially economic." 1

1 F. J. Roethlisberger, Management and Morale, Cambridge, Mass., 1946, 46

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A much more realistic view of the human activities of the industrial system is to view them, not as essentially economic but as essentially social. Roethlisberger expresses what the industrial sociologist means by social and social behavior:

From experience we know that individuals interact and that the expression of that interaction is commonly recognized as social behavior. Whenever a person is acting in accordance with the expectations and sentiments of some other person, or groups of persons, his behavior is social or socialized.2

What the factory amounts to is a coordinated system of human activities which are directed toward the production of material goods. The word "system" is used to indicate something which must be considered as a whole because each part stands in a relation of interdependence to all other parts. The social structure of the factory may be conceived as a rough pyramid. In this pyramid the workers form the broad base with the president of the company or the general manager of the plant at the tip or peak of the pyramid. Between these two extremes there may be conceived layers representing the various levels of the supervisory hierarchy. These layers form the basic, though not the only, status system inside the plant, with the people on the

2 Ibid., 47 (Italics his)
same level sharing the same basic position in the system.

In addition to this broad horizontal type of grouping, there exist vertical groupings which divide the organization into units. Thus one segment will be the accounting division, another the engineering, a third the inspection department and so on. This entire social system is linked together by processes of communication and interaction.

One great advantage of viewing the factory as a social system is that this concept recognizes that there are two major functions of an industrial organization. Ordinarily people think only in terms of the economic function, and the operation of the industrial plant is measured from this viewpoint in terms of costs, profits, technical proficiency and material output. Tied in with the success of the first, however, is the performance of a second function, the satisfaction of human needs of those participating in the industrial system so that the effective cooperation necessary in the enterprise can be achieved.

One of the great services of many studies in industrial sociology has been to show that the two functions are intimately related, and that success in both is necessary for a truly effective total organization. There is general agreement that effectiveness in the first area has far exceeded that in the area of human relationships. In other words, technological progress has far exceeded skill in securing for
individuals and groups working together the satisfactions necessary for truly effective collaboration. Part of the reason for this is undoubtedly the fact that so much more attention has been paid to the technical organization of the plant than to the social organization.

It is certainly true that each individual in the work situation brings with him certain attitudes and expectations which are largely the result of his own personal convictions, sentiments and social background. Despite this fact, it is also true that these individuals in the industrial situation interact daily and that from this association certain patterns of relations take shape among them. Most of the individuals who live their productive life in such patterns come to accept them as the obvious ways of doing things. These patterns define the kind of behavior expected from him and which he may expect from others.

Individuals and groups inside the factory act toward each other in accepted and prescribed ways. Marked differences of behavior exist which indicate recognition of differences in social relationships. Individuals conscious of their membership in one group will react in what is considered the prescribed manner toward the member of another group. For example, the relationship between office worker and shop worker tends to follow a certain pattern, based on consciousness of group
This behavior is largely stereotyped behavior, depending on the conception of the relationship involved. Thus a worker will automatically follow a certain behavior pattern when dealing with his foreman, another with his superintendent, another with members of another department, and still another with fellow workers who are in his own group. Such relationships, though they may be simply expressed, and even though the persons involved take them for granted, often involve fine nuances of conduct and very delicate shadings of social meaning. Thus it is a commonplace practice for a worker to act differently in the presence of his foreman if the foreman's superior is present than he would if only the foreman were present. Similarly the foreman behaves quite differently toward the worker in the presence of the superintendent than he would if they were alone.

Such social relationships as these are taken for granted, but actually a great deal of social conditioning is required for a person to negotiate the maze of finely shaded social gradations and relationships within the industrial community. In an effort to illustrate the fact that we take really complicated social processes and relationships inside the industrial system for granted, a favorite device among industrial sociologists is the use of the fictitious outside observer.
from another culture who views the situation, so to speak, with new eyes.3

In the factory, as in any social setting, a process of evaluation operates constantly. As a result of this continuous process of labeling things in terms of good or bad, better or worse, values are attributed to individuals and to groups performing certain functions, inside the total industrial organism. In other words, there comes into being a complicated prestige scale, according to which persons and the groups to which they belong are rated.

As a result of this prestige system which evaluates people and groups and "places" them, elaborate studies are possible involving the measurement of social distance. Such studies endeavour to measure the differences in values and sentiments which separate one particular group inside the industrial organization from another. Roethlisberger and Dickson put it, "Social distance is to social organization what physical distance is to physical space."4

In the same general way that each person in the plant has a physical location, so too he has a particular social

3 See, for example, Roethlisberger, Management and Morale, Chapter V; Miller and Form, Industrial Sociology, 106-114

4 F. J. Roethlisberger and William J. Dickson, Management and the Worker, Cambridge, Mass., 1939, 556
position in the plant social organization. This point will be discussed in more detail in connection with the motivation of workers; here it is enough to point out that the worker who has managed to reach a certain rank in the prestige scale will tend to react strongly to any change which he thinks will adversely affect his standing on the prestige scale. Under such circumstances, his reaction to change will often seem to the bystander illogical and pointless, because the bystander is not measuring change in terms of relative position on the prestige scale.

Keeping the reality of the prestige scale in mind, it can readily be seen why industrial sociologists say that material goods, wages, hours of work, and the like can not be regarded simply as things. Rather they must be interpreted as carriers of social value. Roethlisberger and Dickson say:

The meanings which any person in any industrial organization assigns to the events and objects in his environment are often determined by the social situation in which the events and objects occur. The significance to an employee of a double-pedestal desk, of a particular kind of pencil, or a handset telephone is determined by the social setting in which these objects appear. If people with double-pedestal desks, supervise people with single-pedestal desks, then double-pedestal desks become symbols of status or prestige in the organization. As patterns of behavior become crystallized, every object in the environment tends to take on a particular social significance. It becomes easy to tell a person's social place in the organization by the objects which he wears and
carries and which surround him.5

For the teacher of the papal encyclicals, there is obviously value in this basic approach of industrial sociology to an industrial plant as a social system with an elaborate status structure and with a finely shaded prestige scale. The student is likely to have the stereotyped idea of the industrial plant as purely an economic system. Therefore, he may reason, if the worker gets sufficient wages, nothing else is necessary; his wants are taken care of.

This narrow outlook blocks the possibility of sympathetic understanding of the more fundamental encyclical ideas which involve a reorganization of industrial society; the point of view of the encyclicals certainly involves the idea that industry must serve more than narrow, strictly economic ends. In Quadragesimo Anno, for example, Pope Pius XI compares the idea of the self-governing economic organization to the fact that men who live in close association naturally establish towns,6 an analogy that would make no sense if industry were being considered only from a very narrow, economic point of view.

The concept of vocational groups as being natural to

5 Roethlisberger and Dickson, Management and the Worker, 557
6 Pope Pius XI, Quadragesimo Anno, N.C.W.C. edition, 1942, par. 83
Civil society can be certainly strengthened and made concrete for the student by the introduction of material from industrial sociology which concentrates on the study of the industrial plant as a social system in itself. Furthermore, the popular idea that a man will be happy if he gets enough money is hard hit by the findings of industrial sociology; studies of the status system of the factory indicate that no person in the industrial organization can be said to be operating strictly by logical or economic considerations. On the contrary, the industrial environment actually involves an entire system of sentiments, in which non-economic motives, interests and processes are of the utmost importance, not only from the point of view of the individuals concerned but in order to create an industrial system that functions at its best.
CHAPTER IV

WHY MEN WORK

Everyone is familiar with the old drawing depicting the donkey with the carrot dangling on a stick in front of his nose, a device designed to keep the donkey moving. In our society, economic self-interest is widely thought of as the carrot that keeps the individual on the go and makes the industrial system continue round.

This concept can be presented in one of two ways, either positively or negatively. Positively, the idea is put forward that man works harder and harder in order to secure the things that money will buy. Negatively, it can be said that man works so that he will not starve. No matter which way it is stated, the motivating force in industrial activity is generally thought to be self-interest, very narrowly conceived in strictly economic terms.

Because this is a traditional tenet of economic liberalism and hence widely accepted in our society, the teacher of the encyclicals is likely to find this attitude so solidified among students that it is like running into a stone wall. The
encyclicals certainly do not accept the idea of economic man, an abstraction whose every motivation can be measured in terms of dollars and cents. In the encyclicals such points as the necessity for the virtues of social justice and social charity are stressed, duties as well as rights are emphasized, and regard for the common good is a key point.

At this juncture, as anyone who has ever publicly discussed the encyclicals will testify, the reaction of some of the group is likely to be that such sentiments are all very well and about what could be expected from a religious leader, but that they are still very impractical. Usually this reaction comes because the students have in mind only this traditional concept of narrow economic self-interest as the motivating force for human activities in industrial life. In this area the findings of industrial sociology can very profitably be introduced, for there are few concepts more thoroughly discredited by current research than that of the primacy of purely economic motives in human behavior. In this connection Wilbert E. Moore points out:

1. The positive formula of "wealth-getting" as the sole significant desire of the human individual neglects the impressive range of goals and aspirations evident in actual behavior, while the negative formula of "struggle for existence" not only neglects nonbiological aspirations but provides no explanation for acquisitive behavior after bare subsistence is assured.

2. The tendency to "biologize" the explanation of human motives, either with reference to ends pursued (such as the familiar economic trilogy of
food, clothing and shelter) or with reference to the source of motives (such as the "aquisitive instinct") finds no confirmation in individual behavior or in the actual process of acquiring motives through socialization of the young.

3. The emphasis on "economic rationality" has obscured both the rational behavior directed toward nonmonetary goals and the important elements of nonrational and irrational (including magical and ritual) behavior of managers and workmen alike.1

One point that is often ignored in discussing economic motivation is the symbolic character of income. More and more wages or income in general have come to be symbolic of social position. As Moore points out,2 in a community which is small and characterized by a relative lack of mobility, many factors such as family background, political and religious affiliation, informal group membership and the like enter into the question of differential valuation or status fixing. In a large and mobile community, however, such as that which becomes increasingly characteristic of our society, many of these standards become meaningless. In such instances, money assumes a much greater importance, not for itself but for its status fixing qualities. Thus a very small, almost negligible, raise in pay may result in great worker satisfaction, if that raise is

1 Wilbert E. Moore, Industrial Relations and the Social Order, New York, 1947, 337
2 Ibid.
considered to be a form of social recognition. Correspondingly, the most minute loss in rate of pay for an individual may produce grave repercussions in employee morale if it is felt to entail loss of status.

As Gardner shows, the status system inside the factory depends on many factors in addition to the economic. Thus it is traditionally recognized that office workers have a higher status than shop workers, even though shop workers may and often do earn more money. Inside the office, many items take on the character of symbols of status, and to have such symbols or not to have them takes on more importance than money. For example, it is amply demonstrated that the frequency or method of payment may be more important after a certain minimum level has been reached than amount. A man may feel promoted if he goes from the weekly to the monthly payroll with no increase in pay. A weekly rate of pay carries higher status than hourly, even if the total of the latter is consistently higher.

Timeclocks often provide good examples of status symbols and their non-monetary importance. If, for example, office workers punch one time clock and shop workers another, the office workers will feel they are losing status if the two

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working forces are consolidated on one big clock. Having a telephone or not having one, being listed in the company phone directory, or not, having a desk with two tiers of drawers or only one, being an office-boy in the executive department, which carries high status, at exactly the same pay as the lower status boy in the accounting office — such examples of the importance of non-economic informal symbols of status inside the social system of industry could go on and on.

So important are such non-monetary considerations, indeed, that there are real possibilities of abuse in them. Witness the companies, known to most people with any business experience, which make a systematic practice of giving symbols of status instead of economic rewards. Such companies simply exploit the fact that a man is more likely to be content on a poorly paid job if he has a big title to go with it.

In discussing the symbolic character of wages, Roethlisberger and Dickson connect this phenomenon with the lack of social recognition of many of the jobs in the complex modern industrial system. They say:

> It is very doubtful if anyone outside of the Western Electric Company knows what Relay E 901 represents, what a bank wiring equipment looks like, or just what in skill and training the performance of these jobs entails. Modern industry has created literally thousands of such new occupations, for which there exist no occupational names that have any social significance outside of the particular industry, factory, or even department, in many cases. As a consequence, the wages attaching to
these jobs become the most important outer symbol of their social value in the community. This in part may account for the worker's preoccupations over wages and wage differentials, and also may account for complaints of monotony in work.4

These remarks on the importance of symbols of status and the general symbolic character of monetary rewards in general should not be taken to mean that economic considerations have no importance. The wage question is important in our industry, but there seems to be no doubt that part of this stress, once a certain minimum is passed, is due to the fact that our culture emphasizes acquisitiveness and that in our culture money means not only ability to buy material things but is also a currency which is one of the chief ways of buying social prestige. Moore puts it this way:

For what is of fundamental significance in the culture of capitalism is its emphasis on the economic individual, that is, the rational, acquisitive, self-interested individual who goes about the pursuit of private ends (generally capable of expression in monetary terms in the forms of wages, rents or profits) in the most efficient manner possible.5

In other words if economic self-interest does make the machine go at present, it is a culturally molded, socially approved motivation, rather than "human nature" as the economic liberals would insist.

4 Roethlisberger and Dickson, Management and the Worker, 574
5 Moore, Industrial Relations and the Social Order, 37
One of the areas in which the fallacy of the primacy of the economic motive has been most evident has been in the thinking on the subject of labor unions. Students who see the necessity of a just wage oftentimes accept the idea of worker organization simply as a necessary evil. They see the need for a little closer approach to equality of bargaining power between corporation and the worker, and they become convinced, often reluctantly, that the men must band together in order to win economic gains. Actually it seems quite clear that more than economic needs motivate union membership in most cases. Golden and Ruttenberg distinguish three basic needs among American workers:

1. Economic -- an adequate plane of living and the necessary amount of job and wage protection
2. Psychological -- the personality needs of freedom of action, self-expression, and creative outlets.
3. Social -- the ties and bonds of group relations and community life.6

The economic motive is widely recognized, to the almost complete exclusion of other factors in union membership. A good case can be made that one of the important causes of industrial unrest may be found in this neglect of the fact that workers seek other things from their jobs than economic betterment; over-

emphasis of economic factors fails to settle real problems in
worker-management relations in non-economic areas. Workers need
some means of self-expression and an outlet for their creative
drives. The line of authority and command in industry has been
essentially a dictatorial one, with orders being passed down
the line from the chairman of the board to the man on the bottom.
This man on the bottom rarely received a chance to express his
own ideas, and often he nurses a feeling that he is "being
shoved around" regardless of the rate of pay. Union membership
can give him at once economic improvement, a feeling that he is
able to exercise his creative ability in a social group of im-
portance, and status in the working community by virtue of his
union activities. In this connection E. Wight Bakke says:

Men whose jobs are interchangeable and carry very
few prestige differentials are provided by the
union with an opportunity to function in roles
which do provide variations in prestige. As a
shop steward or union officer or member of the
grievance committee, a worker can become "a fel-
low your buddies look to".7

This motivation is especially strong in the case of
the man whose leadership qualities have never been utilized in-
side the plant and who gets the chance to use these talents in

7 E. Wight Bakke, "Why Workers Join Unions," in Unions,
Management and the Public, ed., E. Wight Bakke and Clark Kerr,
New York, 1949, 43
union office, but even the rank-and-file member who may not participate very actively can get from his union-membership a sense of belonging, of being a part of a vital and virile social group. Balke points out: "The third goal common to most workers and exceptionally important in the case of a large minority is to gain an increasing measure of independence in and control over their own affairs."

All this is not to say that the economic motive is not important in union membership. It is important, and possibly it is the most important of the three. But the fact that the others are of great importance is demonstrated by the fact that labor troubles are by no means confined to companies which pay low wages. Frequently enough, management expresses astonishment when their workers join unions, explaining that their rate of pay is the highest in the field, their welfare measures advanced, the general policies enlightened. The action of the men in voting for a union strikes them as "ingratitude," but apparently it can never be explained except in terms of non-economic motivations, however vague such motivations may seem to an outsider.

Unions serve workers as a means of self-expression, as a socially integrating force, as an improver of economic conditions, and as an instrument for participation in the productive

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8 Ibid. (italics his), 46
process. Neither unions nor management alone can satisfy all these needs. The fact that exhaustive studies indicate that the efforts of both are necessary to meet workers' needs in an industrial society constitutes one more argument in favor of the Industry Council plan.
CHAPTER V

THE INFORMAL ORGANIZATION OF WORKERS

Analogous to the widespread if erroneous ideas that worker motivation can be adequately explained on purely economic terms is the relative lack of appreciation of the function of informal organization in the work situation. When "organization" is mentioned, the layman tends to think of clubs or lodges or unions; to the sociologist however it has a more general meaning. Miller and Form state:

From a sociological point of view, social organization arises whenever people interact on a continuous basis in pursuit of common goals. Organization consists of the routines which group members display in their behavior toward each other. More exactly, organization consists of the behavior expectations, that the people have toward each other as group members... All the uniform, routine or conventional ways of group action constitute social organization. When these expected patterns of behavior are not observed, disequilibrium, disorganization or social change ensues.1

Usually when people speak of the organization of industry or of a particular plant, they have in mind only one

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1 Miller and Form, Industrial Sociology, 144
kind of organization, formal organization. The formal organization of the plant is normally visually expressed in the neat charts found in the offices of managers, with clearly marked levels and lines of authority. These charts are normally considered as representing the real social organization of the plant, as the actual pattern of power, authority and sanction. Yet research in industrial sociology has definitely established the existence of informal organization as significant to the actual pattern of social order inside the plant as the formal organization. As Gardner puts it:

We see little cliques of people who gather together for lunch or a game of cards at noon, or who meet together after work. We see friendships and antagonisms, people who identify with each other on one ground or another, groups who hold aloof from others, and a wide variety of activities that constitute what we call "informal organization".

... Now these informal relations are not merely a matter of friendly association and conversation unrelated to work behavior. Numerous studies have shown that they play a major role in determining the attitudes and behavior of workers with respect to their work, their superiors and the company. In fact, the most powerful controls over the individual lie in the hands of the group itself and are expressed through the informal structure.²

Whereas in formal organization the persons are incidental to the relationship defined, the study of informal organ-

ization includes examination of primary groups, cliques and congeniality groups that operate in shop or office. It also considers the norms and values, folkways and mores which guide the behavior of workers. Sometimes these norms and values help to fulfill the aims of the formal organization, sometimes they work to block such aims.

Membership in the social group or clique is connected with observation or failure to observe the informal rules governing production. On the basis of their findings in the Hawthorne experiments, Roethlisberger and Dickson say the rules operating in this area may be summed up as follows:

1. You should not turn out too much work. If you do, you are a "rate-buster."
2. You should not turn out too little work. If you do, you are a "chiseler."
3. You should not tell the supervisor anything that will react to the detriment of an associate. If you do, you are a "squealer."
4. You should not attempt to maintain social distance or act officious. If you are an inspector, for example, you should not act like one.3

Informal organization is a potent source of social control. Inside the informal organization there develops a prestige and power structure which may not coincide with like structures in the formal organization. To a very large extent,

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3 Roethlisberger and Dickson, Management and the Worker, 522
it is true that the relation of the informal organization to the formal will largely determine the effectiveness of the latter's operations.

The study of this informal organization and its functioning is one of the major contributions of industrial sociology to the field of industrial organization. Even though an organization cannot be understood without study of its formal structure, it is also true that study of that structure alone will not explain the functioning or malfunctioning of the organization. A big reason for this is the fact that in formal organization, people are considered as incidental to the relationship defined, as has already been pointed out. In other words, formal organization looks at the people who fill various positions and at their relations with each other as constants, rather than as variables. According to this view, they reason and act in a manner management thinks they should act, that is in the manner best suited to their own economic self-interest and the economic well being of the plant.

Such assumptions which are implicit in the view that study of the formal organization is study of the total organization are denied by sociologists. People can be understood only in their social relations with each other; these social relations, not the individual, are the basic units of observation for the sociologists. In no sense can persons filling
various positions in the formal organization be considered as constants nor can their relationships ever be regarded as other than variable. "Orders from the boss," special incentive pay rates, the utmost assembly-line efficiency will still not account for the total picture of productivity. Production must also take into account systems of informal agreement among the workers themselves, between workers and their foreman, among the foremen themselves, between foremen and supervisors and the like. The worker who produces more or less than the informally agreed upon quantity is likely to be subjected to informal sanctions. As Moore puts it:

Indeed, the whole of informal organization seems to imply a substitution of group ends for competitive individual ends. This does not necessarily mean that the general ends of the formal organization are not being served; it does imply that the means to those ends are not those which are formally assumed, but are on the contrary those which are consistent with the activities and security of the informal group. . . . To the extent that informal groups exist at all, they modify the behavior of their members along the lines of common interest and joint activity. 4

Often the first reaction to an exposition of the existence of a system of informal organization is that it is "not right." It should be emphasized here that what is involved is not a question strictly of right and wrong; informal organization is a fact; it can serve good ends or bad ends, but it

4 Moore, Industrial Relations and the Social Order, 331. (Italics his)
cannot be eliminated. As long as human beings are associated in a common effort for production, informal organization will continue.

What value do these conclusions have in teaching the papal encyclicals? Three important points are immediately obvious. First of all, since the fact that individual workers sacrifice their own gain for the sake of group interest is well documented, there is again a mass of evidence to re-inforce the fact that economic individual self-interest is not the only important factor operating in worker motivations. Secondly, in more general terms, it may be said that informal organization often tends to protect the social goals of industry, for example, by tempering the effect of a too-competitive system. Formal organization on the other hand tends to protect strictly technical or economic ends of industry. To the extent that industry increasingly takes into account the social implications of production, the aims of the formal and informal organizations will come ever closer together. Thirdly, the real existence of social groups inside the plant is a good indication that natural groups can be utilized in the vocational group system, as suggested by the Pope. Furthermore, it can be said that inclusion of such groups will help achieve the second possibility, that of making the aims of formal and informal organization coincide due to the increased voice in the affairs of industry by workers.
CHAPTER VI

TYPICAL FACTORS AFFECTING PRODUCTIVITY

The experiments at the Western Electric Hawthorne works in Chicago started out as an engineering rather than a sociological experiment. The initial test was designed to measure the effect of illumination on worker productivity. To start with, the engineers in charge imagined that improved illumination would increase efficiency in production. To test this hypothesis, they set up a test in which they thought they had created rigid controls, introducing only one change at a time and utilizing a control group as well as an experimental group. On one point the engineers' expectations were realized; production did go up. But production went up not only for the experimental room where the lighting was improved, but also in the control room where lighting conditions had been kept stable.

In an attempt to explain this phenomenon, the engineers then reversed the test. Illumination was sharply decreased in the experimental room and kept constant in the control room.

1 Roethlisberger and Dickson, Management and the Worker, 14-18

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room. Production was expected to decline in the poorly lighted room. It did not in fact decline until it became extremely difficult for the operatives to see what they were doing, at the point when illumination had declined to about the level of bright moonlight. Obviously, illumination was only one factor in production, and apparently not a very important one. Most importantly, the results indicated that the variables involved in production had not been rigidly controlled, as the engineers thought; there were many more factors operating in the production area than they had conceived.

The results of this first test provoked the interest of Elton Mayo, and he took a research team to the plant for further study. Their first important work, known as the Relay Assembly Test Room experiment, is considered a milestone in scientific experiment in industry. Under carefully worked out conditions a test room was established where accurate records could be made of all that happened. Then physical factors were varied one at a time in an effort to measure effect on productivity. Using the data obtained, Whitehead and a statistical staff literally spent years working on the project and could not

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2 Roethlisberger and Dickson, Management and the Worker, 1936, and T. W. Whitehead, The Industrial Worker, Volume I, Cambridge, Mass., 1938
find even one significant correlation of output and variation of physical circumstance.

Without detailing the various steps in the experimentation, it can be readily seen now that Mayo in the beginning made a vitally important mistake of the same nature as that made by the lighting engineers: although he thought he was exercising strict control over variables, he had failed to take into account the sociological implications of the work group. During the course of the experiment group relations had developed, and these group relations were more important as far as morale and productivity were concerned than any of the physical changes introduced.

On the basis of the earlier findings, the final experiments at Hawthorne, known as the Bank Wiring Observation Room tests, involved an elaborate study of a work situation from a sociological, rather than an engineering, point of view. The previous experiments had shown that group feelings were of vital importance; these findings were confirmed by the interviewing program started as a result of the early studies. The tests had established that social organization was more important in productivity than physical changes in environment. The Bank Wiring Room experiments were then designed to study the infor-

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3 Roethlisberger and Dickson, Management and the Worker, 379-548
mal work group structure in order to gain more exact knowledge about the operation of social groups within the plant.

Again without going into the too lengthy details of the experiments, certain conclusions of particular importance may be noted here.

First of all, it was obvious that the working group actually determined the individual's work output, by reference to some standard never clearly stated but which represented the group's idea of a fair day's work. This setting of production standards is only one of many standards set up by the social group. Routines, duties, relationships to others, customs and the like are strongly molded inside the group. Strong social control exists to insure conformity to group standards and expectations. In general, the norms of the worker group are much more likely to prevail in case of conflict than the norms of management which usually have as their basic starting-point the tenets of individualism found in classical economics. The findings of the experiments indicate clearly that men live in groups and largely conform to group standards, not only at home and in the community, but in the work situation. Mayo said:

The desire to stand well with one's fellows, the so-called human instinct of association easily outweighs the merely individual interest and the logical reasoning upon which so many spurious principles of management are based. 4

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The experiments had effectively demolished what Mayo called the "rabble hypothesis" which had long been a postulate in economic thinking. This view of society, a fundamental one in economic liberalism, sees society as a horde of unorganized individuals, seeking only narrow self-interest, and going about that search for economic self-improvement logically. This attitude of economic liberalism is certainly one of the major stumbling blocks encountered in teaching the papal encyclicals. In these experiments, a high degree of worker participation was involved. The purpose of the various experiments was carefully explained at regular intervals. The workers themselves were consulted about changes, and they were encouraged to make their own comments and suggestions. This amount of participation led to increased production, even when lighting and other physical factors were deliberately worsened. In the light of the vocational group system which would involve greater participation for workers in such matters, there is in the experiments great significance for the teacher of the papal encyclicals.

During the war years, another important study was done, this time in the aircraft industry of Southern California. The problem of absenteeism and labor turnover was a crucial one.

5 Elton Mayo and George F. F. Lombard, Teamwork and Labor Turnover in the Aircraft Industry of Southern California, Cambridge, Mass., 1944
for the all-important airplane industry, and Mayo and Lombard were called in to help. On the basis of the previous experiments, they concentrated immediately on the social organization of the plant, rather than on studying attempts to improve the situation by music on the assembly line, bond rallies, visiting heroes and the like.

Careful statistical study soon led them to the conclusion that there was a direct relationship between the quality of the group to which the worker belonged and absenteeism and labor turnover. They discovered that group solidarity for production is what was needed. Says Mayo:

Wherever it is characteristic, as in the California of 1945, that by reason of external circumstances these groups have little opportunity to form, the immediate symptom is labor turnover, absenteeism, and the like. Man's desire to be continuously associated in work with his fellows is a strong, if not the strongest, human characteristic. Any disregard of it by management or any ill-advised attempt to defeat this human impulse leads instantly to some form of defeat for management itself.6

In his study Mayo traces the growth of group solidarity through three phases or identifiable units: the "natural" group, the "family" group, and the "organized" group. The "natural" group is the term he applies to small groups of from

6 Mayo, The Social Problems of an Industrial Civilization, 111
three to seven workers, a size evidently conducive to growth of face-to-face intimacy. The "family" group is the term used for a larger group where a hard core of regular workers exists; these regular workers in large measure determine group standards and goals. The "organized" group is a community organization embracing the entire plant and knitting together the members of the natural groups in a common purpose. To the extent that group solidarity is strengthened by the existence of such groups, absenteeism and turnover decrease, with consequent good effects on productivity. Where such grouping is frustrated by various factors, individual morale and productivity go down, labor turnover and absenteeism increase.

Similar conclusions are inevitable from a recent study in the steel industry. In this project, major attention was not focused on the question of teamwork, but the implications of their findings in this direction are important. For instance, in speaking of the Hot Mills section of the plant, the research director calls the integration of all hot mill workers into a single team or crew "its most salient characteristic." In this department, morale was high, absenteeism was noticeably less than in other departments, and interviews with worker after worker pointed to the existence of "team-spirit" as the important factor involved.

7 Charles R. Walker, Steeltown, New York, 1950
The importance of such research is obvious. The papal encyclicals envision a system in which industries are to a large extent self-governing. Necessarily such a system would demand a relatively high degree of solidarity for a common purpose. The findings of industrial sociology such as those cited indicate that the achievement of this group solidarity is not only possible, it is even essential for increased productivity.
CHAPTER VII

THE CHANGING FACE OF INDUSTRIAL SOCIETY

The examples previously cited from the materials of industrial sociology, although useful, by no means exhaust the type of possibility inherent in this material. In general, the studies previously referred to tend to be "practical", to be highly production-conscious. As such, they have an obvious value in teaching. There is, however, another and rather different approach which is extremely helpful in a broader, much more generalized context. That approach is typified by W. Lloyd Warner and his associates in the Yankee City Series, especially in the classic The Social System of the Modern Factory.¹ The studies by Warner and his colleagues have been marked by less clinicalism than that of Mayo and his school, and the approach is also characterized by a better conceptual framework than the studies of Mayo, which sometimes tend to multiply data almost interminably, out of proportion to the net findings.

One might say that the Warner approach can supply the

¹ See bibliography
broader, long-range view which is sometimes badly lacking in students approaching the papal encyclicals for the first time. The encyclicals are concerned with the social question, which might be defined as the totality of all those questions which the transformation and incessant changes in the industrial system pose for those who wish to organize society on the basis of justice and charity. American students tend to think of social questions rather than the social question in the papal sense.

Their interest often can be aroused in social problems on an individual basis, involving such questions as a just wage, hours of work and decent working conditions. Frequently, however, they are strangers to the idea that the socio-economic system we know is not a perfectly stable thing; they find it difficult to see that the system has undergone and is now undergoing rapid transformation, oftentimes without the majority of the people realizing this fact. In a sense one can say that often students are being asked to consider the proposed solutions of the social problem, without ever becoming personally convinced that the social problem is a reality. Their non-verbalized attitude seems to be that the status quo is a fixed state of affairs, and they find it difficult to see too much wrong with it from a structural or institutional point of view. If imperfections exist, they seem to feel, they are minor ones, which can either be corrected or, if that is not feasible, left alone on the
perfectly valid theory that no society on this earth is ever going to be perfect. Their attitude might be summed up at best by the saying: "The devil we know is preferable to the one we don't know."

This position ignores one important fact. The choice is not whether we keep the kind of society we have or reconstruct it. Our system has been and is now undergoing radical changes. Therefore the question now is not: "Do we want change?" The only question now is what kind of change are we going to have, what direction will society take. Certainly the forces loosed in the modern world are complex and have their roots far back in history. If one describes the revolution in ideas and morals that placed economic activity outside of the rule of moral law, if one carefully delineates the major implications of economic, political and religious liberalism, one is using a more important approach than industrial sociology can supply. Nevertheless industrial sociology does have something to contribute towards building a picture of a world in transition, and its contribution can be of great value by virtue of its concreteness.

In this area again, the use of purely economic data is a recognized technique. In connection with the changing character of the current economic scene, figures on corporation ownership are normally introduced. Data from Berle and Means'
classic study and from later studies on the relative strength
of the corporation in the market, on the ownership and control
of such corporations, on changes in the traditional concepts of
property ownership and the like, will be introduced. The con-
cept of the "managerial revolution" and what it involves will
be examined. The contributions that industrial sociology can
make here, however, have the added advantage of being somewhat
personalized. Statistics about the shifting of property own-
ership to corporate control, for example, take on more meaning
when examined in terms of a specific plant and a specific town.
What the division of labor and increased mechanization involve
in addition to productivity statistics can be shown by use of
such material. Warner and Low's study of the strike in Yankee
City shoe factories provides a good example of this type of
material.3

To begin with, we now know that division of labor is
not a peculiarity of modern society. It is now established that
some division of labor existed in all societies, even if it
was purely a sexual division, contrary to the views once held

2 A.A. Berle and G. C. Means, The Modern Corporation
and Private Property, New York, 1933

3 W. Lloyd Warner and J. O. Low, The Social System
of a Modern Factory, New Haven, 1947
which pictured primitive peoples living in a homogeneous mass. As Moore puts it, "Modern specialization cannot therefore be contrasted with an assumed society or period having no division of labor. The difference is one of degree and not of kind." Nevertheless, the high degree of specialization present in our society, if not merely its presence or absence, is pregnant with important social implications for the future.

In every society each person has certain statuses which unite him with some people and mark him off from others. If the statuses are those over which he has no control, such as the statuses which follow from sex in most cultures, and from age in others, those statuses are called "ascribed statuses." In reference to occupation, for example, one basis for status ascription would be the inheritance of occupational category along biological lines. In general, one may say that in modern American industry one's exact occupational status is not ascribed, although there is good evidence that a considerable degree of ascribed class status exists. In addition to some bases for status inside the industrial plant seen earlier, one of the most important bases for status achievement involves skill, that is, the individual's productive usefulness. Status achievement in this country, in other words, is often dependent upon

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4 Moore, *Industrial Relations and the Social Order*, 53
achieved specialized capacities enjoyed by the individual. It is precisely in virtue of this fact that studies relating to the extent and effects of technological change take on great significance.

Warner and Low trace the question of skill and the division of labor in the Yankee City shoe industry. They describe skill as "generally related to control over objects through the use of tools, simple or complex." Normally it is an attribute of a person, but the word is also applied to jobs which demand a person with skill. "Selecting and deciding," say Warner and Low, "plus dexterity in accomplishment are characteristics of skill." Using the same general criteria of selection, decision and dexterity, a low-skilled worker is one who operates in a set pattern, using dexterity but without the flexibility of selection and decision. The medium-skilled worker is, as the term implies, somewhere in the middle of these two, with a job largely prescribed but with a certain modicum of freedom of choice.

In the period when shoemaking was a handicraft there was a well developed hierarchy of jobs based on the skill re-

5 Warner and Low, The Social System of a Modern Factory, 68-89
6 Ibid., 73
7 Ibid., 74
quired for each job. This hierarchy may be visualized in step-ladder fashion. The young man put his foot on the ladder in a low-skill job, performed under direction. When he gained proficiency he was able to begin the same process on a medium-skilled job, still under direction. Eventually when he had mastered a real, complete skill, he stood at the top of the hierarchy as a master shoemaker. There he had economic security and status, both inside the plant and in the community, because of the advance he had made and because he was himself in a supervisory position now as a master craftsman.

In a modern shoe factory the situation is now quite radically changed. The worker entering the factory can not count on starting at a low-skill job, learning new skills and eventually arriving at the top of a skill hierarchy. This change is due to two related trends, that toward greater division of labor and that toward increasing mechanization. Greater division of labor means breaking one job or skill into two or more components. This process can readily be visualized; if S equals skill, after the division of labor S equals s s s s s. At the same time increasing mechanization spells an increase in routine operations, rather than in any operations demanding selection or decision. As Warner and Low put it:

Watching the shoe operatives working in the techniques of shoemaking, we could not fail to recognize that as new machines were installed in the
factory more and more of the tool-using function of the operatives was absorbed by the machine and the job of the operative became more and more routinized. Real craftsmanship lost its usefulness as the operatives who had had much freedom of action in tool-using techniques were forced to conform to a set pattern of behavior attuned to the rhythm and tempo of the machine.

Among the immediate effects of this two-fold process of division of labor and increased mechanization is a change in the method of selecting foremen. Previously the foreman was a man who was himself a master craftsman. Workers knew he was aware of their problems and skills, and the individual worker could himself hope to become a master craftsman and hence a working boss at least. Now both these opportunities are decreasing. The foreman can be someone able only to enforce conformity to a set pattern; he need not be a skilled craftsman. The chance for the worker to become foreman has greatly diminished; the skills of the routine machine are not necessarily the skills of the foreman, and even if he possesses those skills, the operative normally gets no opportunity to demonstrate them. With a major part of his chance at upward mobility removed, the worker might seek security and higher status in working techniques. Here again, however, the situation betrays his hopes; there is no skill hierarchy involving any progression from machine to machine, and there is no possibility of great skill.

8 Ibid., 76
when the machine involves only routine operations. Warner and Low point out, however, that it is not quite accurate to say that skill was no longer necessary in the production of shoes. Rather, the skills have been transferred out of the shoe factory into allied industries, such as the manufacture of shoe machinery. In this industry designers and engineers think of new and cheaper ways of making shoes and design machines to fit the process. These are high skills, but obviously the skills have left the shoe factory proper and, equally obviously, numerically less skilled positions have resulted from the change-over.

To sum up then, the skill hierarchy in the shoe factory has been destroyed by increasing division of labor and increasing mechanization. This has not only destroyed the economic security once attached to rising in the skill hierarchy, it has also removed from the workers involved one of the strongest bases for status. We already saw, in the chapter entitled "Why Men Work", that status was a very important factor in the achievement of worker satisfaction. Destruction of skills means that the economic security and psychological satisfaction lost in this way must be achieved in some other way. Nor can this trend away from skills in industry be expected to reverse itself. As Moore points out, "Specialization is not simply a major phenomenon in industrial organization; it is also an ideal."9

9 Moore, Industrial Relations and the Social Order, 57
One moral is obvious: the healthy industrial society of the future will have to offer something like more participation via the industry council to take the place of the skill hierarchy.

Another important factor in the changing character of the industrial picture involves the change in the dominant ownership pattern. Using economic data, this fact is illustrated by the phenomenon of management control rather than owner control of corporations. Similarly the ramifications of a few hundred leading corporations and their dominant position in their fields may be statistically documented. Studies in industrial sociology again can serve to personalize these facts. For example, the book Steeltown\(^\text{10}\) was designed to be an industrial case history of the conflict between progress and security.

It is primarily a study of technological progress which involved the proposed abandonment of an important plant and the effect of this move upon the workers and the community involved. The study offers many valuable lessons, but not the least of its value is that it graphically presents a phenomenon not unusual in America - a town that is largely a one-plant community, in which the bulk of the town's economic activities center around the large plant. The question of abandoning the plant for reasons of technological advance elsewhere dramatizes the

\(^{10}\) Walker, Steeltown
far-reaching social implications of such decisions in human terms.

Whereas Steeltown dramatizes in terms of the here-and-now, Warner and Low trace the historical process by which the ownership and control of the shoe factory passed out of the community. II Paralleling the movement of skill out of the shoe factory into the hands of the designers of shoe machinery was another movement, this one of ownership and control out of the town itself into the hands of absentee owners and managers. In the early days of the shoe industry, ownership and management were vested in residents of the town itself. The owners were active in community affairs, and there was in general a more neighborly approach to the relationship of the plant, the workers, and the community as a whole. Informal social controls stemming from community traditions led to a feeling of mutual responsibility. It is probable that many persons who discuss contemporary industrial problems still have in mind some hazy picture of such a personal relationship with more of the characteristics of the primary group than the present industrial reality. Today more and more shoe factories in Yankee City are being absorbed by larger enterprises whose headquarters are far away. The implications of this fact are many. Warner and Low

11 Warner and Low, The Social System of the Modern Factory, 108-133
sum up part of the problem:

Although the large enterprise remains, in the last analysis, subject to the control of the larger society, it tends to escape the control of individual communities in which the individual manufacturing units are located. With the expansion of the enterprise to the point where it operates several factories in different communities and has its main office and chief executives in some large city at a distance from any of the factory towns, the social distance between the top executives, and the factory community becomes very great. This is true, too, of the relations between the operatives and the top executives. Every level in the managerial hierarchy above the factory manager increases the social distance between the operatives and the chief executives of the enterprise. In large companies, therefore, the individuals at the two extremes of the hierarchy are strangers rather than friends; the top executives may issue orders in conformity with business logic which injure the interests of the workers — and not even be aware of the fact.12

It is not unreasonable that the townspeople under such circumstances feel that the interests of the absentee owners and management are not necessarily those of the community. It seems obvious that what is needed to repair the situation is the restoration of some form of control which will guarantee that the direction and conduct of the industrial plant will not be unilaterally directed, that decisions will not be taken only for the benefit of share-holders and management if such ends are seriously detrimental to the general welfare of the community. Actually the process that is under way is one that has many

12 Ibid., 114 (Italics mine)
parallels in other areas subjected to sociological investigation. It is a commonplace in sociology to say that the informal social controls and sanctions of the primary community will necessarily tend to be replaced by formalized controls and authoritatively imposed sanctions in a community characterized by large scale loss of primary contact. Thus it is taken for granted that positive law, enforced by the police and the courts, will be characteristic of the metropolis, whereas in the small village gossip and public opinion in general may be equally effective for social control, if not more so. Similarly, in situations such as the one described by Warner and Low, the informal social controls have disappeared due to the jack-and-the-beanstalk growth of the industrial hierarchy right out of the community. In such a case, the problem is one of substituting some form of formalized social control for the informal one that previously existed. The teacher of the papal encyclicals who uses studies of communities where these conditions prevail is then able to point out the obvious to his students: the theory of the industry council system is not a wild idea, but an answer to a real need in modern society, like that spelled out in such studies in industrial sociology.
CHAPTER VIII

POSSIBLE PITFALLS

The previous chapters have been devoted to illustrations of the help the teacher of the papal encyclicals can receive from the introduction of the materials of industrial sociology as supplementary material. At this point it is necessary to warn that all is not clear sailing. Although its contributions are large, the research done in the field of industrial sociology has been subjected to severe criticism, much of which seems quite justified. Some of this criticism is of special interest to the teacher of the encyclicals, since in using the material in question it will be necessary to be wary of a certain amount of bias in the work and to caution students about certain questionable assumptions underlying many of these studies.

Criticism of the field of industrial sociology has centered particularly on the work of Elton Mayo and his associates, together with that literature which is lumped together under the general description of "the human relations approach in industry." That Mayo should be singled out for criticism is
understandable, not only because his work lays itself open to such charges but because of the commanding position he occupies. As is obvious from the citations throughout this thesis, the work of Mayo and his associates was pioneer work, and the studies directed by him and his associates bulk large in the total literature in the field. Although more and more work is being done, for instance at the University of Chicago, nevertheless Mayo and his associates occupy a commanding position to date in this area of industrial sociology. This is so true that C. Wright Mills states that "the central work of the field still seems to be the Harvard studies" and goes on to refer to "the so-called Mayo school, the oldest, best known, and apparently the school from which other tendencies now arise."¹

Because of Mayo's dominating position, even in purely quantitative terms, the teacher who would use the materials in industrial sociology will necessarily be forced to draw heavily on his work and that of his associates. Despite criticisms, there is no possibility of dismissing the achievements of Mayo in this field. The research he and his followers have done has

¹ C. Wright Mills, "The Contribution of Sociology to Studies of Industrial Relations," Proceedings of the First Annual Meeting, Industrial Relations Research Association, Cleveland, 1948, 201
made their place secure. At the same time, in using the material one must be realistic enough to face the fact that in this work there are certain serious flaws, omissions and unproved assumptions for which correction must be made.

In general, the criticism of the Mayo school may be classified under two headings, that of method and of bias. 2 From the point of view of method, Mayo is subject to criticism for what seems a bad case of radical empiricism. He is completely sold on "learning by doing" in the field of social science, and his approach is a solidly clinical one. His concept of the scientific method leads him to be very scornful of any hypothesizing; for Mayo, observation is the thing. One serious defect in this approach is that oftentimes the research undertaken seems to lack any theoretical setting. Facts are accumulated at a rate and in a quantity calculated to impress any onlooker, but oftentimes the net results from extremely de-

ination, American Sociological Review, XII, February, 1947, 123-124
tailed studies are meager indeed. Thus when the early researchers solemnly announced that the way persons behave in a social situation depends upon their definition of the situation, the statement struck sociologists as being somewhat like the elephant in labor who finally gave birth to a mouse.

It should be remembered here that Mayo began his studies from the point of view of individual psychology. As a result, his approach to the early experiments was, to put it mildly, sociologically naive; apparently Mayo and his associates were not familiar with comparable work by sociologists in other than industrial areas. In his early studies, Mayo completely failed to grasp the significance of the group, and over the years he apparently had to learn the hard way, only gradually being weaned from a highly individualized approach by an overwhelming weight of evidence in the opposite direction. That he has recognized early errors in approach is certainly to his credit, but these flaws must be taken into account in using the published material.

Because of his bias toward radical empiricism, Mayo consistently ignores the positive role of theory in social research. A good indication of how much his work suffers by this omission may be seen by comparing his work with that of W. Lloyd Warner and J. O. Low in a study of a similar nature.\(^3\) Mayo and

\(^3\) Warner and Low, The Social System of the Modern Factory
his school have never really viewed industry inside an adequate institutional framework of the larger society. The focus of attention in Mayo is upon the individual worker. This worker's actions and reactions are examined from the point of view of his "feelings" about particular subjects. It is true that conclusions are drawn about group life which are significant, even if sketchy because of the original lack of a working hypothesis. Even these conclusions, however, do not have the significance they could have if they were elaborated inside a more adequate conceptual framework of the larger social situation outside the industrial plant. In treating the factory as a social system, Mayo and his school seem seriously to err in failing to give adequate consideration to the place of this social system inside the larger social system. It is possible that part of the paucity of constructive initial hypotheses, as well as the very limited number of conclusions from great masses of data, may be traced to this lack of a larger, over-all conceptual framework into which to fit the industrial plant social system. Lacking such a context, the researchers sometimes seem to have no idea of what direction their research is to take, and the conclusions of wide significance that could be drawn from some of their studies are only hinted at, leaving the reader to supply the larger framework and draw his own broader conclusions if he is able.
In contrast to this approach, the work of Warner and Low can be cited as an example of the greater value of research inside a larger institutional framework, carried on by people who are not afraid to make tentative hypotheses to be tested against the actual social facts. In the course of their study, Warner and Low made a painstaking analysis of the breakdown of the skill hierarchy in the industrial plant. Treating the skill hierarchy as an age-grade structure, Warner and Low examined its breakdown, not simply inside the plant, but as it related to the entire social structure of the community outside the plant. On the basis of their research they were able to show how this breakdown of the skill hierarchy was typical of great changes in the class and occupational structure of the United States; they made the changes make sense, not only in the plant, but outside the plant. By relating the life inside the smaller social system of the industrial plant to the life of the larger social system outside, they accomplished something which gave their work a much wider value than that of the typical Mayo study, handicapped by an excessively clinical, non-theoretical approach.

In addition to this clinicalism which marks the methods of Mayo and his school, there are many indications that his work is also marred by a pro-management bias. Certain assumptions tacitly made in the Mayo researches have to be watched
for carefully in using these materials in papal encyclical classes. It should be remembered that the research undertaken by Mayo was instituted by management. It was designed to offer answers to questions specifically raised by management. The continuation of the research was possible only with the continued approval of management. If the attitude of management on many problems creeps in, to the detriment of scientific objectivity, it is not surprising. Nevertheless, the bias shown constitutes a serious hazard in the use of this material, and it is made all the more serious precisely because it is unspoken and presumably unconscious.

A serious example of this bias can be seen in the treatment of the informal organization of workers. The fact that there are two divisions in the organization of industry, the formal and the informal, is stressed in the Mayo literature. A key point that is emphasized is that the successful functioning of both is essential to the successful conduct of that industry. In discussing the formal organization, however, only that which relates to the patterns of interaction and communication established by management is considered. There is little or no attention paid to the formal organization of workers, the union. Correspondingly, although great attention is paid to the informal organization of workers, when management is considered only the formal organization is considered, in which logical and business-
like efficiency is supposed to prevail; the question of the informal organization of management, the role of non-logical sentiments, and other important consequences of such organization is omitted from the studies.

When Mayo and his associates study the worker, they are studying him as an individual and in relation to informal social groups and cliques. They are largely ignoring the fact that union organization in this country has created a new power structure inside of industry. In view of the fact that some fifteen million workers belong to unions and approximately twice that number work in plants covered by union contracts, such an omission is a serious one from the point of view of validity of research findings. In addition, the omission of emphasis on the changing power structure inside of industry is strikingly similar to the attitude of the businessman who is still reluctant to admit that "unions are here to stay." There is little doubt that some of the enthusiasm for the "human relations approach" demonstrated among businessmen may be traced to their enthusiasm, not only for higher production and lower labor turnover rate, but also for a return to an individual relationship between management and "cooperative workers", all of whose troubles have been smoothed away by a high-powered non-directive counselling system which makes union organization "unnecessary". C. Wright Mills states:
"The managers looking to this new field of human relations hope to lower production costs, ease tensions inside their plants, as revealed by high turnover, expensive absenteeism, and unsound disgruntlement, and find new symbols of justification for the concentrated power which they exercise in the economic as well as other orders of modern society.\textsuperscript{4}

So marked is this attitude of businessmen toward much of the research in industrial sociology that some doubt has been cast upon perfectly valid conclusions in the field, and some people even refer to this division of sociological study as "management sociology."

A central and constantly recurring theme in the Mayo studies is that cooperation must be secured. The ideal worker is the happy worker, the ideal shop is the one in which cooperation prevails, the ideal informal group the one whose actions tend to raise productivity. All this may be true enough, but Mayo and his school never raise any question about the ends the productive enterprise is supposed to serve. Collaboration is the goal, but the question, "Cooperation for what ends?" is never raised. On the contrary, the assumption throughout Mayo literature is that "cooperation" means acceding to management's wishes and ideals in every detail. The worker who goes happily about his business conforming to management's idea of the way a

\textsuperscript{4} Mills, "The Contribution of Sociology to Studies of Industrial Relations, Proceedings, Industrial Relations Research Association, 204
worker should act is the ideal worker in the Mayo literature.

When Mayo and his school make statements to the effect that "we have failed to secure effective cooperation," it seems clearly implicit that the "we" usually refers to management. The idea that the ends of management are sometimes too narrow, that managers are not infallible, that collaboration is not a good in itself unless the end sought is good - such points are never raised in the Mayo studies. There is more than a suspicion of a new kind of sociological Taylorization in this material, and the reception given these studies by some businessmen tends to confirm the possibility of such an interpretation. If care is not used in presenting the material, the Mayo findings could easily become the equivalent of the old "give 'em a lunchroom so they won't join the union" school. Oftentimes the social skills Mayo speaks of simply involve manipulation of the sentiments and emotions of workers for the purposes of management. In other words, the status quo is never questioned in this literature; social skill is at its highest when the ends laid down by management are being sought. In view of the fact that the social encyclicals talk in terms of important changes in the present socio-economic order, such as those involving greater real participation by workers in industry, a broader conception of social purpose and responsibility in industry and like, the teacher who uses the Mayo material will have to be
wary of the underlying assumption that the collaboration to be sought in industry is necessarily collaboration for the ends now considered primary by management.

These twin errors which have been described, clinicalism and the assumption that the status quo is the ideal situation, are serious flaws in the Mayo work. They need not constitute fatal flaws, however. Relatively few studies in the social sciences can be accepted without critical evaluation, and the Mayo studies are simply one more illustration of this fact. Serious as the errors are the forewarned teacher of the papal encyclicals can still make very good use of this material, provided he is on his guard against bias and excessive clinicalism before he begins.
CHAPTER IX

SUMMARY AND CONCLUSION

Industrial sociology involves analysis of phenomena of economic activity, using such sociological concepts as status, role, class, informal group and the like. Its aim is the development of a sociological theory of economic action and economic organization. Employing a non-geographical concept of community as a group sharing the basic conditions of a common life, industrial sociology concentrates on recording and organizing experience in human association in the industrial community. In its studies, industrial sociology analyzes group behavior, status positions of individuals inside industrial groups, and, in general, the social organization of work plant society. Although there is in sociology a long tradition of study of the impact of economic organization upon social processes, as is indicated by the work of LePlay, Durkheim, Max Weber and many others, what we have come to call industrial sociology today is generally dated from the Hawthorne experiments carried out by Mayo and his associates at the Western Electric plant in Chicago. Today interest in industrial sociology is increasing rapidly. In
1946 the American Sociological Society added a special section devoted to the subject, and an increasing number of research projects can be expected in the future.

The use of purely economic data in teaching the papal encyclicals is an accepted technique. This material is used to indicate the accuracy of historical statements or to make general statements have specific application to the American scene. The purpose of this thesis has been to indicate that in the growing literature of industrial sociology there may be found much material which will be extremely useful to the teacher of the papal encyclicals. This material is particularly in order when the discussion leaves what has been called the dollar-and-cents area for discussion of such non-economic needs as, for example, the necessity of worker and public representation with management in industry councils. There is no attempt to "prove" ethical statements with such empiric studies in the social sciences, but because such studies are eminently practical, with productivity a matter of key concern, the use of the research material has particular value for students who tend to think the long-range proposals in the encyclicals are "too idealistic to work."

No attempt has been made to catalogue every example that could have been taken from industrial sociology, nor has any attempt been made to cover the entire literature in the
field of industrial sociology. Either of these projects would have constituted a weighty volume in itself, and both are clearly beyond the scope of a thesis. Rather examples have been selected simply to illustrate the type of material which is available for use by the teacher of the papal social encyclicals.

One of the most important preliminary notions in industrial sociology is the concept of the industrial plant as a social system. This concept alone, simple as it is, can be of great service to the teacher. This view recognizes that the factory actually has two major functions, not merely one; in addition to its carrying economic function, the plant must also satisfy the human needs of those participating. So essential is this satisfaction of human needs that if it is not accomplished, the failure will seriously interfere with the carrying out of the technical or economic function. Inside the social system that is the factory there is an elaborate status system and a set of behavior patterns which are accepted as the normal way of doing things. Individuals are judged by their conformity or lack of conformity to these group behavior patterns and position in the status system can be evaluated by the finely shaded prestige scale that is found to exist in these plants.

Since many students, if not most of them, think only in terms of dollars-and-cents when they think of industrial problems, often such concepts as the vocational group system
described in the encyclicals leave them cold. Industrial sociology, utilizing the concept of the factory as a social system, can supply study after study to prove that a purely economic approach to industry is a fruitless one, and thus help the student to see why the papal encyclicals go far beyond such questions as just wages and reasonable hours of work.

The papal encyclicals certainly visualize a social order where appeal is made to more than purely economic motivation. At the same time, many students come into the class accepting a cardinal principle of economic liberalism, the notion that the sole motivating factor in industry is self-interest, very narrowly conceived in purely economic terms. A student with such views is likely to think the stress on social justice and social charity in the encyclicals extremely unrealistic. Here examination of the status system inside the industrial plant, with careful attention to such easily recognized symbols of status as telephones, double-pedestal desks, weekly rather than hourly pay, office rather than shop jobs and the like, will provide a large amount of material to indicate the great importance of many non-economic motivations already operating in industry. Similar evidence is available to indicate the fact that many factors in addition to the purely economic motives prompt membership in labor organizations. The reality of such motives for union membership helps to indicate that the papal
ideas directed toward greater worker participation actually are in line with the real needs of a healthy industrial society; the reality of non-economic motivation involving status inside the plant and the larger community indicate that the hope of appealing successfully to non-economic motives aimed at social justice and the common good is by no means unrealistic.

Exploring the social organization of the plant further, industrial sociology establishes conclusively the existence of informal organization side by side with the formal organization expressed in the table of organization in the office of the manager. Study of this informal organization is concerned with the person in the act of fulfilling his role. It can be shown that informal organization constitutes a potent form of social control and that the relation of the informal organization to the formal will largely determine the effectiveness of the latter's operations. The fact that workers consistently sacrifice their own individual gain for the sake of the group interest, as shown in studies of informal organization, constitutes another important section of evidence denying that economic self-interest is the only important factor at work in the industrial system. It can also be shown that in the informal organization the group protects the individual from excessive demands made in the name of "economic efficiency." The reality of these social groups inside the plant provides an empirical indication that natural groups
can be utilized in the vocational group system, as suggested by the Popes. Lastly, it can be shown that bringing the aims of the formal and the informal organization together will benefit the technical goals of greater production.

Descriptions of some typical experiments in industrial sociology were then introduced with emphasis on the goal of increased productivity. The first examples indicated that the group relations inside the plant were of greater importance than any changes in physical environment; the unintentional establishment of a work group which participated in the planning of the experimental conditions led to increased production, whether physical conditions were improved or worsened. Then the informal work group structure was studied. In this experiment it was clearly established that the informal group actually now sets production standards according to their idea of a fair day's work, and that strong social control operates to secure conformity to informal group standards. It was also shown that in cases of conflict, the standards of the work group are much more likely to prevail than the norms of management; real success in production cannot be achieved unless the social function of industry, now served by informal groups can be reconciled with the technical function in terms of which management reasons. The studies made in the Southern California aircraft industry were cited for the importance of their conclusion: the quality of
the group to which a worker belongs has a direct bearing on production; the problem is one of utilizing and fostering groups inside industry, not fighting such groups. These studies were cited for two main reasons: to indicate the kind of study which is being done in the field and also to show the reality and practical necessity of group organization inside of industry.

It was pointed out that students who are being asked to consider proposed solutions to the social problem actually are often blissfully unaware of the fact that there is any social problem. They are not familiar with the fact that the socio-economic system is subject to rapid change and that change, rather than stability, has been a characteristic note of society since the Industrial Revolution. In this area economic data often is introduced to indicate concentration of wealth, to show the changed concept of ownership represented by stock ownership, to demonstrate the implications of the managerial revolution and the like. Industrial sociology can show the effect of such transformations in terms of their social impact, which is the important point involved in such changes. Studies, for example of the social implications of ownership which involve the relationship of one large plant and one small town are dramatic and much more impressive than the same picture presented in statistical form. The far-reaching consequences of the constant increase in division of labor and mechanization can be vividly
shown in terms of real persons and of actual plants and communities. Such studies also make real for the student the fact that the informal social control over industry found in the primary-type community is more and more a thing of the past; lacking this form of social control, the necessity of a substitute then makes more sense to the student. More important than any details in such studies, however, is their primary lesson: change is a fact, whether we like it or not. The big question to be decided is the direction or channeling of the changes.

The many criticisms of industrial sociology were then summarized and evaluated. First of all, it was stated that Mayo and his school occupy a commanding position in the field, by virtue of pioneer work, sheer weight of studies and number of followers. It was pointed out that criticisms of the Mayo Harvard school can be classified under the headings of clinicalism and bias. There is little doubt that the work of the Mayo school is characterized by an attitude of radical empiricism. This flaw prevents formulation of adequate working hypotheses in accordance with which the study can be initially directed and leads to a paucity of conclusions from vast masses of details. The school lacks an adequate conceptual framework within which they could relate their findings to the problems of the larger social system outside the plant. Because of this, the broader implications of many of their findings must be
supplied by the reader of their studies. In addition to this
defect of excessive clinicalism, it was shown that the Mayo
studies indicated an unconscious bias in the direction of man-
agement goals. An instance of this was the lack of attention
to the formal organization of workers into unions and the fail-
ure to examine the existence of non-rational motivations in
informal organization of management. Importantly, it was seen
that Mayo talks much about collaboration and cooperation; the
assumption always seems to be, however, that this is to be col-
laboration on management's terms and in accordance with manage-
ment's ideas. The question of "collaboration for what ends?"
is never raised; the values and aims of the status quo repre-
sented by management are assumed to be correct.

Despite these two errors of clinicalism and bias
however, it was pointed out that the Mayo studies could still be
used with great profit. Few studies in the social sciences will
be used without critical evaluation by the teacher; if the same
critical corrective action is applied to the Mayo school, the
findings of their studies can profitably be related to the
social encyclicals course. It should also be remembered that
more and more studies are now being made; it can safely be ex-
pected that many of these later studies will benefit from the
criticisms of the Mayo school and will be free of such errors.
All in all, even if one considers only the material now avail-
able in the field, it seems quite safe to say that in the literature of industrial sociology the teacher of the papal encyclicals will find a wealth of supplementary material to assist him in his task.
BIBLIOGRAPHY

A. BOOKS

Bakke, E. Wight and Clark Kerr, Unions, Management and the Public

Bennett, John W. and Melvin M. Tumin, Social Life, New York,
1948.

Berle, A. A. and G. C. Means, The Modern Corporation and Private
Property, New York, 1933.

Cronin, Rev. John F., Catholic Social Principles, Milwaukee,
1950.


Gurvitch, Georges and Wilbert E. Moore, Twentieth Century
Sociology, New York, 1945.

Heron, Alexander R., Why Men Work, Stanford, Cal., 1948.


Mayo, Elton, The Human Problems of an Industrial Civilization,
New York, 1933.

Mayo, Elton, The Social Problems of an Industrial Civilization,

Mayo, Elton and George F. F. Lombard, Teamwork and Labor
Turnover in the Aircraft Industry of Southern California,
Cambridge, Mass., 1944.

Miller, Delbert C. and William H. Forn, Industrial Sociology,
New York, 1951.


B. PAMPHLETS


C. ARTICLES


