

Productivity (1954)

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(LT. RUSH TOLAND MEMORIAL STUDY NO. 2)

**Employee
Understanding and Teamwork
for Greater Productivity**

JOHN P. TROXELL

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FEB 11 1958

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Abstract

EMPLOYEE UNDERSTANDING AND TEAMWORK FOR GREATER PRODUCTIVITY

Productivity has risen persistently during the past century, providing for each generation a level of living approximately double that of the generation preceding. While the rise has been more rapid in some sectors of the economy (manufacturing and transport for example) than in others, market forces have operated to bring about a diffusion of the gains throughout the entire economy. Compensation of employees has risen (in terms of constant dollars:—"real wages") in very nearly precise proportion to the long-term rise in productivity, the rate of rise averaging close to two percent annually.

The causes of this remarkable lifting-force are various. Science and invention, capital investment, expanding markets, improved management, a rising level of health and education—these and other factors play a part. Supporting this advance, and being supported by it, is the general vitality of our economic system, particularly the rich treasure of science and technology to which research is constantly adding, and the freedom of labor and management to perform their functions.

The nation's competitive enterprise spirit is, itself, the key factor underlying productivity advances and the steadily rising volume and variety of goods available to consumers at prices they are able to pay.

Factors favoring the continued rise of productivity may be expected to exert their influence in the future, barring the development of an opinion-climate hostile to innovation, to investment, to the maintenance of competition.

However, the rise is not to be looked upon as self-generating, or resulting from momentum. Productivity rises from the continuous application of human thought and effort, to the end not that men should work harder, but to work better—with better tools or materials or methods. And to work *together* better—achieve good teamwork.

Effective teamwork holds elements that go beyond mere collaborated effort. One element is a *shared purpose*, understood and esteemed by those who are collaborating. Another is *organization* (simple or complex, as the case requires)—clear assignment of function, methods of relating functions to each other, channels for instruction and information. There is also *administration*—planning, guiding and coordinating of effort in order to achieve team objectives—and the whole complex of factors—human and mechanical, which go to make up the enterprise.

In good teamwork, each member knows what is expected of him and is able to perform his part. And each member knows enough about the working of the team as a whole to know who may be able to help him if need arises, and whom he may be able to help.

In superlative teamwork, there will be found a *strong team spirit*. Team success will be identified with individual success. The individual's desire to assert initiative and to excel in his own right will not be denied, though it may need to be guided wisely by the leader in such manner as to enhance team performance. Holding the balance true between teamwork and individualism—encouraging the one without retarding the other—is one of the arts of supervision. Especially is this important in the guidance of management teams, since their performance is a paramount factor in the productivity of the organization.

Teamwork is promoted, too, by *participation* in goal-setting and decision-making. The democratic ideal does not require that all affairs be conducted in town-meeting fashion, but it does imply the right to express one's views on matters affecting him, and that decisions reached through consultation and persuasion are preferred to those based on coercion.

The method of participation has been found more efficient in industry than the method of dominance, as well as more generally satisfying to leaders and to those they supervise and guide. New techniques of participation are being tested in many an enterprise. Technological developments point to encouragement of this trend. For example, automation holds prospect of transferring to control mechanisms a considerable part of the humdrum work heretofore done manually, with correlative expansion of those phases of work which call for imagination and resourcefulness.

Essential to satisfaction in work and to motivation for good work is an *understanding relationship among those who work together*. To say of a supervisor and his people that they understand one another, is not to say that they are in agreement about everything, but rather that one can say to the other, "I can understand your feeling about this matter, though I cannot agree with you on it."

Appreciation of the interests which employers and employees hold in common is an essential ingredient of an understanding relationship. Given opportunity to express themselves in opinion polls, employees generally show a comprehension of these common interests. They know the importance of customer good-will, and the necessity for efficient operation. They realize that progress is essential, and that it involves change. They recognize the importance of leadership; they want to respect those who direct their work, respect them for their fairness as much as for their competence.

The fact that employees generally recognize and understand the common

interests they share with their employers has impressed observers from other countries. Productivity Teams from countries of Europe, visiting the United States to observe industrial methods, have commented upon the "productivity consciousness" which pervades the thinking and conduct of American working people at all levels of the enterprise. These observers believe that eagerness to find better methods is characteristic of employees and managers alike in this country. They comment upon the cordiality which seems to prevail among all ranks and between ranks, from top management to machine-operator, attributing this in part to the fact that the men of management so generally have risen from the work-force.

That viewpoint runs counter to the reports of certain native observers who believe that restriction of output is almost a universal practice among American workers, whether unionized or not. Probably neither viewpoint is wholly accurate. There is no doubt much left to be done in the promotion of understanding of common goals. But progress has been made; and alert managements, cooperating in some instances with research teams of social scientists, are seeking answers to the question: *What combination of factors will best supply motivation for good work and satisfaction in work, under varying circumstances?*

Collective bargaining holds possibility of influencing productivity favorably or unfavorably. Examples of make-work rules in union agreements, or restrictive customs not openly declared, are not uncommon. But they do not appear to be increasing—perhaps because there is a widening understanding of how our economy functions.

Pledges of union cooperation toward productivity are beginning to be more numerous in union agreements. However, the implementing of the pledge is not often spelled out in detail. The majority of managements do not seek, nor do most unions care to offer, a formalized program of union-management cooperation on production matters. The informal method of consultation as need arises has yielded good results where the parties have confidence in one another and approach a common problem with realistic understanding of, and concern for, the long-run interests of both employer and employees.

Plans which call for more definite sharing of the function of promoting efficiency and reducing costs have been advocated. Given enthusiastic support by union and management, such plans may yield admirable results, although the record shows failures too. Assuredly, the development of constructive methods whereby unions can aid in raising productivity is a goal worth striving for—"a real opportunity for social experimentation" as a leading industrialist has put it.

Programs of union-management cooperation on matters that affect production indirectly—promotion of safety, of apprenticeship, of job evaluation,

of waste reduction—have proven fruitful. A program of this nature sometimes leads management and union to enlarge the area of collaboration to include problems of quality, cost control and the like.

To the quest for a formula for teamwork for productivity, answers are offered in variety. Some place chief emphasis upon *direct money reward*, geared in some measure to individual or group performance. Others believe that *intangible incentives* count for even more,—the give and take of communication, consultation and participation.

Experience with plans or formulas for evoking good teamwork reveals that no single pattern predominates. There are common threads to be sure: fair compensation, conditions of work that are consonant with well-being and self-respect, acceptance of a common objective, a sense of responsibility for better performance on a continuing basis, consultation (in some areas) and information-sharing; and underlying all, understanding and competent leadership, the best stimulus to good team spirit.

In sum, it can be said that the pattern as a whole is what really counts. People in an organization give their best to the job to be done, not in spurts of strenuous effort, but in a sustained and natural way, when the consequences of so doing are seen to be rewarding and meaningful. Tangible rewards—the shared gain of higher productivity—are a part of the total pattern. Intangible consequences, too, yield satisfactions to which few people are indifferent—the pride of accomplishment, the zest of working with others in satisfying, productive effort, the recognition of common ground and common goals.

Toward improving the pattern of teamwork in industry, toward bringing the average nearer to the best, all can contribute. Those who occupy positions of influence in commerce and industry, in education, in government, and in the labor movement, can contribute most abundantly. But just as there must be competent leadership, there must also be the will to respond positively and intelligently to that leadership.

The second (LT. TOLAND MEMORIAL FELLOWSHIP
STUDY) *to explore ways and means of improving
employer-employee understanding and cooperation.*
(no. 2)



... Employee
**Understanding and Teamwork
for Greater Productivity //**
†

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FOREWORD

This document is dedicated to the concept that prosperity grows out of the production of people working together in a free competitive private enterprise society.

It has been made possible by Lt. Ben Toland—a young marine who laid down his life for his country in the battle of Iwo Jima. He was convinced that both labor and management have the responsibility to think constructively about ways and means to improve employee-employer understanding and mutual good faith.

In a will written on a piece of brown wrapping paper and pinned to his battle jacket, Lt. Toland bequeathed \$1200 to the NAM and \$600 each to the CIO and the AFL to promote better employer-employee relations. The NAM augmented this bequest with an appropriation of \$16,000 and established two Lt. Toland fellowship awards.

The first award was won by Dr. Paul Pigors, Associate Professor of Industrial Relations at the Massachusetts Institute of Technology, whose report on “Effective Communication in Industry” has received wide acclaim as a fresh analysis of the basis for better understanding between people who work at all levels in industry.

The author of the present study, Dr. John P. Troxell, Director of the Division of Industrial Relations, Graduate School of Business, Stanford University, the recipient of the second competitive award, has prepared a manuscript which makes its appearance at a significant moment—for, as we stand on the threshold of an era which holds great promise for a vastly increased level of living, we are acutely aware that it is achievable only if the delicate human problems involved can be met with wisdom and understanding.

Lt. Toland realized that one of the major hopes for a better world lies in harmony and understanding between labor and management instead of strife and conflict. He further realized that only if labor and management have the *will* to cooperate and recognize that theirs is a common task, can industry serve the nation by producing more and better goods at lower prices for more people and thus raise the standard of living for all.

The National Association of Manufacturers shares with the author the hope that this report will stimulate both labor and management to put forth their constructive cooperation, and thus give substance to Lt. Toland’s faith in the future of our country.

TABLE OF CONTENTS

Chapter

FOREWORD	
1. PRODUCTIVITY AND THE COMMON GOOD	1
The Challenge of Our Times	1
Three Key Concepts	1
Understanding	2
Teamwork	2
Productivity	2
A Yardstick of Efficiency	3
Productivity and Progress	4
The Record of the Recent Past	4
Our Needs in the Years Ahead	4
The Diffusion of Productivity Gains	5
Enhancing Creative Opportunity	6
Productivity in a High-Employment Economy	6
Checking an Inflationary Spiral	7
2. ELEMENTS OF PRODUCTIVITY	8
Efforts and Attitudes	8
Competition — The Driving Force	9
Management Skills	9
“Camaraderie in Productivity”	10
Understanding the Role of Productivity	10
Motivation and Performance	11
Technological Change, Productivity and Employment	12
Recognizing the Common Interest in Productivity	12
3. PRODUCTIVITY AND ITS DIMENSIONS	15
The Measurement of Productivity Change	15
Types of Data and Their Limitation	15
The Dependability of Productivity Measures	16
The Pace of Productivity Change	17
Shifts in Labor Force	17
Gains Unrecorded	18
The Pattern of Change	19
Manufacturing and Mining	19
Agriculture and Public Utilities	19
Other Major Industry Groups	20
Diversity Within Major Groups and Companies	20
Productivity Trends	21
After 1940	21
Wartime Trends	21
The Post-War Years	22
The Prospect Before Us	23
Some Negative and Positive Influences	23
Automation	24
Influences Favoring Productivity Interrelated	25

The Distribution of Productivity Gains	26
Increased Leisure	26
Effect on Prices	27
Workers Reap Major Benefits	27
Employee Income Responsive to Overall Gains	28
The Process of Adjustment	29
Wage Changes and Productivity	29
The "Annual Improvement Factor" Principle	30
The GM-UAW Clause	31
Some Questions About the GM Formula	33
Wage Formula and Wage Policy	34
4. ELEMENTS OF TEAMWORK	36
Essentials for Successful Teamwork	36
Motivation in Teamwork	37
Integration of Organizational Goals	37
Team Success and Individual Success	38
Sound Organization as a Factor for Teamwork	38
Administration and Teamwork	39
Participation	40
5. UNDERSTANDING	46
Understanding in the Employment Relationship	46
Employee Goals and Attitudes	47
Executive Attitudes	49
The Vitality of Attitudes of Management and Employees	52
Common Interests — and "Identification"	53
Can Loyalties Be Concurrent?	54
Some Fundamentals of Successful Management	56
The Importance of Customer Goodwill	56
The Necessity for Efficient Operation and for Competence in Work	56
Constant Improvement	56
The Part Played by Leadership	57
6. PRODUCTIVITY AND UNION-MANAGEMENT RELATIONS	62
Union-Management Cooperation	62
Experience with Joint Production Committees	65
"Formal Plans" for Cooperation	65
Informal Cooperation for Productivity	67
Distaste for "Co-determination"	69
"Opportunity in Social Experimentation"	71
Productivity Clauses in Agreements	72
Collective Bargaining and Restrictions	75
Overcoming Restrictive Practices — The Outlook	76
7. PLANS AND FORMULAS — OR FUNDAMENTALS?	81
Is There a Formula for Superlative Teamwork?	82
Common Elements in Patterns of Teamwork	83
Consequences of Teamwork: Tangible and Intangible	85
CHECK LIST	87
BIBLIOGRAPHY	91

I. PRODUCTIVITY AND THE COMMON GOOD

— *not alone to the people of this country, but hope to the world . . . that in due time the weights should be lifted from the shoulders of all men . . .*

—Abraham Lincoln

The Challenge of Our Times

THE DEMOCRATIC WAY OF LIFE is being tested, as it has been tested in times past, for its strength and its tenacity. The trial may be greatly prolonged, because those who seek to destroy freedom are strong and determined. To a unique degree, the responsibility for leadership in the defense of freedom rests upon the United States.

Great resources are needed for the years ahead, and these we have. Our natural resources are immense, though not inexhaustible; they must be utilized with the least possible waste.

Our human resources are great and growing. Our population increases by well over two millions annually, and average levels of health and education are steadily rising.

But national greatness is more than mere numbers and material resources. It is the aggregate of these, together with the resources of mind and spirit. It is measured by the success achieved by a nation's people in working together for great purposes.

We have proven that free labor and free enterprise are far more productive of goods and services, and of all else that makes life worth living, than any system which denies freedom can be. And, in the years ahead, we expect to continue to demonstrate the effectiveness of a free economy for all to see.

Three Key Concepts

Understanding, Teamwork, and Productivity are the three key concepts on which we shall focus our attention in this essay. Each is good in itself; each can stand alone and bid us strive to win it, as an end as well as a means. Linked together, they represent a high challenge to all of us.

Few needs are greater than our need for higher productivity, our ability to produce more and more goods and services more and more efficiently. Nothing is more essential to its achievement than effective teamwork on the part of producers. And no element of teamwork is more vital than the element expressed in the word "understanding".

UNDERSTANDING

Understanding is a word that can have several meanings. But when we say "understanding between", we have focused rather clearly upon one of these. We are referring to a relationship, and we are implying a process.

The *relationship* involves human beings. The *process* is one involving, typically, a series of acts and attitudes—willingness to comprehend, ability to offer and to grasp meanings and opinions, contact sufficient to exchange information, and so on. The process results in a relationship which can be the foundation for action.

There may be understanding among people without agreement or harmony. But, commonly, a measure of agreement can be expected to follow upon understanding among men, or groups. And harmony is more likely to ensue than if there is misunderstanding. The latter may not spell disaster, but it promises no real good. Understanding may not guarantee utopia, but you can build upon it.

TEAMWORK

Teamwork is group activity, associative effort, cooperation, coordination but more than these.

Even when we apply the term to activities wherein participants do not even know each other, teamwork implies a common cause, or at least a sense of *shared purpose*, a goal understood by all, in some measure. And it implies *organization*—the purposive arrangement of parts into an effective whole—although very simple forms of organization often suffice.

Successful teamwork requires other ingredients as well: the *willingness* of each member of the team to perform his part, *knowledge* of what is expected of him, and the *ability* to function in his role. Adequate *guidance* is requisite to teamwork, together with the *systems* and the *signals* necessary to the realization of team goals.

In the pages following, our main focus will be on the contribution which understanding and teamwork can make to enhancing productivity, the third of our key concepts.

PRODUCTIVITY

Productivity is perhaps the most important single yardstick for appraising the over-all effectiveness of an economy in producing want-satisfying goods

and services. It may be defined as the relationship between the output of goods and services and the input of one or more of the various resource factors required for such production.

Output may be defined in terms of units of physical production or of value produced. Generally, output is related to one factor of production, with the relationship expressed in units appropriate to each. We speak of an *increase in productivity* when there is a rise in the output per unit of resources used in production, or when there is a decline in the amount of input required to produce the same volume of output.

The input factor generally featured in measures of productivity is labor, expressed in terms of the number of workers or of man-hours worked or paid for. Thus, the term "increase in productivity" most commonly refers to a rise in production per man-hour.

A Yardstick of Efficiency

This relationship measures the efficiency with which labor is utilized in productive endeavor. Statistics of productivity give no indication of the specific contributions of labor or capital or of any other productive factor. Output per man-hour reflects the composite effect of a number of influences just as mileage per gallon of gasoline, commonly used as an over-all measure of the performance of an automobile, depends on many factors (i.e., road conditions, the type and age of the car) other than the quality of the gasoline.

While changes in productivity are commonly expressed in terms of changes in output per man-hour, this does not, of course, imply that greater human effort accompanies rising productivity. No one would claim that the workman of today must exert himself more intensively than the workman of 1900. Beyond any doubt, the opposite is the case.

The dramatic rise in output per man-hour during the past half-century is due to the application of science to industry, to the increase in capital investment per worker, and other factors. Perhaps one can find examples of tasks which require more strenuous physical effort on the part of the worker performing them, as productivity rises; but they would be few in number compared to the thousands of tasks in which rising productivity has been accompanied by the release of human hands and backs from exhausting and monotonous work.

And few would argue that the miner or factory worker in the United States exerts himself more strenuously than the worker in Britain, France or Germany who produces scarcely half as much per hour worked. Nor does the American farmer work harder in producing enough food, on the average, to feed fifteen factory employees, than the European farmer whose output can feed only five.

Productivity and Progress

One need not be an economist to understand that our level of material well-being depends on production. We cannot have more than we can produce. And, with a growing population, the standard of living of the nation as a whole can only increase if the growth in production proceeds at a faster pace than the growth in the number of people to be supported by the fruits of productive effort. In brief, higher living standards depend on increasing per capita production.

The level of per capita production is determined, essentially, by four factors: the proportion of the population in the labor force, the level of employment, the length of the work week, and output per hour worked. Except in wartime, the proportion of the population in the labor force tends to remain relatively stable over decades, while a lengthening of the average work week seems improbable except as an emergency measure.

Consequently (given a high level of employment) greater production per capita, and thus higher living standards, can be attained only by increasing productivity—raising output per man-hour.

The Record of the Recent Past

The significance of productivity increases to the achievement of higher levels of material well-being becomes clear when we look at the record of the past. In a recent study of America's economic growth during the first half of the twentieth century, Frederick C. Mills found that, while population doubled during this period, the production of goods and services multiplied five-fold.¹

In per capita terms, then, output increased two and one-half times. This prodigious increase, moreover, was achieved with an increase in human effort of only 80 percent — well below the increase in population.

Both aspects of this remarkable growth are directly traceable to notable gains in productivity, which, in terms of output per man-hour, increased 181 percent over the fifty-year period.

The results of this achievement are mirrored in the everyday life of America. Nowhere else on earth can so many of life's material riches be acquired in return for so small an expenditure of effort. In no other land will an hour's labor buy so many of the necessities, comforts and luxuries of life. Yet much of what we take for granted in modern-day America would have been impossible except for the persistent rise in productivity.

Our Needs in the Years Ahead

That productivity will keep on rising in the future is no doubt generally assumed. Perhaps many people believe that the process is a very natural one

¹ Frederick C. Mills. *Productivity and Economic Progress*, "Occasional Papers", p. 38. New York: National Bureau of Economic Research, 1952.

— if not quite automatic, at any rate self-generating.

But the fact is that rising productivity results only from continuous, intelligent effort on the part of people. Without this effort, productivity and its counterpart, the general level of living, would cease to rise. In fact, both would tend to fall as population increases, because of the greater pressure upon natural resources, the ultimate source of the livelihood of mankind.

Science and invention, the accumulation of capital, and the development of skills, both manual and managerial — these have been man's chief aids in his incessant quest for a higher level of living, and will continue as paramount factors. But to exert their influence effectively, they must be generally accepted as vital forces to economic life, and productively applied to its betterment.

For the years immediately ahead, we face the burdens forced upon us by the world situation — an enormous program of armament and heavy commitments to aid those people who stand with us against the Communist threat.

Nor should we overlook such factors as the expanded proportions of children and older people in our population, and the fact that during the next decade participants in the civilian labor force are likely to constitute a smaller percentage of the population than heretofore.

All of these things point to the very urgent present need for increasing productivity, one of the dynamic characteristics of our economy for a century or more. But the case for increasing productivity does not rest primarily on the factors mentioned above. Some of them are temporary, or at any rate temporarily accentuated.

Were none of them present, the case for rising productivity would be just as strong, for the American people have come to count upon a continuing rise in living standards. That rise can almost be thought of as one of the promises of our system of free private enterprise, a promise which has been kept up to now and which must not be broken in the years ahead.

The Diffusion of Productivity Gains

The effects of productivity gains pervade many facets of our national life — the professions, the arts and sciences — as well as industry and commerce. In addition to the gains that can be measured, such as the saving in labor effort required to produce a ton of steel, advances that are qualitative in nature must be considered, even though we lack precise ways of incorporating these gains in a productivity index. The effectiveness of the medical profession, for example, has risen as a result of such scientific advances as the antibiotics and other "miracle" drugs, not to mention the telephone and the automobile which conserve the doctor's time.

In the home, the gains in productivity have been as noteworthy as any that we have experienced during the past half-century, and not in labor-saving

only, though in this direction they are spectacular indeed. Some chores have been taken over, in large part, by the laundries and cleaning plants and other service establishments. On the other hand, with the development of the automatic washer and the electric dryer and ironer, some housewives prefer to do the family laundry at home. Both developments have effected not only a saving of work time, freeing the homemaker for other activities, but a persistent reduction in the amount of heavy and unpleasant work as well.

The gains yielded by rising productivity, viewed over a considerable period of time — a generation or a half century, perhaps — have been very substantial and very widely diffused. The progressively wider distribution of national wealth and national income — with its dramatic evidence that the “fruits have been shared” — is discussed specifically in Chapter III.

Enhancing Creative Opportunity

Men hunger for more than bread and the other material requisites or comforts of life. For the realm of the mind and the spirit, too, productivity makes higher levels of satisfaction possible. With the exception of ascetic communities, only in a society with a highly productive economic system can there be, as in the United States, a continuing rise in the proportion of the population engaged in artistic, literary, and scholarly pursuits.

Higher productivity enhances the opportunity for creative endeavor in yet another dimension. Consider the extent to which the gains from rising productivity have been taken in the form of increased leisure. During the first half of the present century, the average work week in non-farm employment fell from 58 hours to 40 hours. The decline is even sharper if we think of the time spent at work during the course of a year: paid holidays and vacations are now as common as they were rare in 1900. The greater opportunity which increased leisure provides for engaging in educational and cultural pursuits, and for participating in civic and community life, surely ranks as one of the major contributions of higher productivity to our well-being. Indeed, there is abundant evidence that social and cultural gains follow closely in the train of material advancement.

Productivity in a High-Employment Economy

The need for greater productivity becomes particularly pressing in an economy operating at/or near capacity and characterized by high employment levels. Pressure for higher incomes, always insistent, becomes doubly strong. Organized workers are in a good position to press for wage increases. Businessmen may be reluctant to offer resistance. The chief aim during such periods is to keep production going. The market may appear to be able to bear higher prices.

Thus the tendency for the price-level to creep upward gathers momentum. Each rise brings pressure for still higher wages, and is apt to result, barring a stiffening of consumer resistance, in still higher prices. Meanwhile, those who cannot increase their incomes commensurate with the price rise must revise their level of living downward.

Checking an Inflationary Spiral

That this spiral cannot climb upward forever seems to be generally understood; likewise, that the day of reckoning can be bitter. Not so generally understood, perhaps, is the important part that rising productivity can play in checking the spiral. This point has been clearly stated by the economists of the American Federation of Labor:

Living standards do not rise by any magic formula. They can rise only when workers produce more per hour and per year of work.²

This summary of their position, published in the February 1946 issue of AFL's *Labor's Monthly Survey* followed a vigorous analysis of the inflationary forces then rampant. The threatened shrinkage in the value of the dollar, said the *Survey*, "will rob every worker of part of his wage increase — and more widespread harm than this will be done. For all older workers and widows living on pensions . . . everyone with war bonds or other savings" will suffer loss. "Most American workers", the article continues, "are too intelligent to let themselves be fooled. They know that wage increases have to be paid out of the earnings of the business, or else by a price increase."³

² *Labor's Monthly Survey*, Washington, D. C.,: American Federation of Labor, February 1946. Opinion polls offer impressive evidence that there is a general understanding of the disadvantages of a rising spiral of wages and prices. Opinions of manual workers, of union members, and of other groups separately analyzed, are substantially similar. See Hazel Erskins, "What the People Think", *Labor and Nation*, March-April 1948, pp. 17 ff.

³ *Ibid.*

II. ELEMENTS OF PRODUCTIVITY

The history of the productivity of our labor is the foundation of a scientific economic history, and the backbone of any and all history.

—V. G. Simkhovitch

Efforts and Attitudes

THE ATTITUDES OF ALL INDIVIDUALS and groups in the economy—attitudes toward research and innovation, toward saving and investment, toward risk and reward, toward enterprise and work—are directly relevant to the achievement of economic growth, as pointed up by de Tocqueville in his classic, *Democracy in America*, over a century ago. In this penetrating commentary on the American scene, de Tocqueville writes:

It would seem as if every imagination in the United States were upon the stretch to invent means of increasing the wealth and satisfying the wants of the public. The best-informed inhabitants of each district constantly use their information to discover new truths which may augment the general prosperity; and if they have made any such discoveries, they eagerly surrender them to the mass of the people.

... In the United States, the greatest undertakings and speculations are executed without difficulty, because the whole population is engaged in productive industry, and because the poorest as well as the most opulent members of the commonwealth are ready to combine their efforts for these purposes.⁴

De Tocqueville's comments have been echoed by more recent observers from other lands.

The Ingredients of Productivity as Seen from Abroad

During the past several years, Great Britain, France and other nations of Europe have sent "Productivity Teams" to the United States to study the

⁴ Alexis de Tocqueville, *Democracy in America*, ed. Henry Steele Commager, (New York: Oxford University Press, 1947), pp. 317, 360.

factors which have raised our industries to a level of efficiency much higher than that of their European counterparts.

The teams have generally included managers, engineers and union officials, in about equal numbers. Being practical men, they have sought practical answers. Yet, in their reports, frequent reference is made to a concept which sounds theoretical—the “productivity consciousness” found among all ranks of management and labor in the plants visited.

“Our study in the United States made it clear that a special state of mind was the basis of all the achievements in productivity that we saw,” states a French team.⁵ Its report proceeds to point out, however, that this state of mind, though basic, is not the whole story. American productivity is “not manna fallen from heaven, but the result of sustained effort, scientifically organized, and with universal backing.”⁶ A British team reports that, in America, “Productivity-consciousness is to be found among all grades of employees, from executive to shop-level.”⁷ In defining this concept, they stress certain forces that are more powerful and pervasive in our country than in their own.

1. COMPETITION—THE DRIVING FORCE

First, they emphasize *the driving force of competition* in the American economy. Managers know that the bell tolls for those enterprises which fail to apply better methods continually. It is not only the competition *among firms* in a given industry, but competition *among industries* that gives strong impetus to constant search for the better way, the better product, the better service.

Advantages resulting from improved techniques reach the ultimate consumer very quickly in this country, in contrast with those foreign countries wherein competition among wholesalers and retailers is much less vigorous. Continuous effort to excel in values offered to customers, both ultimate and intermediate, is characteristic of American enterprise.

2. MANAGEMENT SKILLS

Second, they stress *the practice of assigning managerial jobs on the basis of capacity to manage*. While exceptions to this practice may be found (i.e., in some family-owned firms), they are of relatively minor importance in the aggregate. In the United States, the able and ambitious employee—unlike

⁵ *La Productivite en Action dans la Construction Electrique*. (Paris, 1951), p. 3.

⁶ *Ibid.*

⁷ *Productivity Team Report: Steel Founding*, (London: Anglo-American Council on Productivity, 1949), pp. 33, 36. See also, *Management Abstract*, II, (London: November 1949), p. 216.

his counterpart in some countries of continental Europe—knows that a humble origin is no real handicap.⁸

Skill and diligence are traits which employees expect of their supervisors. Employee opinion surveys, discussed below, indicate that this expectation is very common; the able supervisor is commended by his staff, while the incompetent supervisor, even if he is the “easy-going” type, tends to arouse dissatisfaction among those he supervises.

3. “CAMERADERIE IN PRODUCTIVITY”

A third factor is the *emphasis on encouraging employees to contribute to the solution of production problems*. The employee in the shop is encouraged to develop a better way to perform his duties. Staff technicians, engineers and executives are constantly on the alert, and consult directly with foremen and production workers, to find solutions to production problems and to test innovations.

The productivity of the managerial group is recognized as an indispensable foundation for high productivity of employees at the bench or the machine. “Cameraderie in productivity” is the phrase used by a French engineer; “the air of comradeship between management and men” was evident to a number of the visiting Productivity Teams, and is stressed in their reports.

4. UNDERSTANDING THE ROLE OF PRODUCTIVITY

The fourth factor stressed is the *widespread understanding of the role of productivity* in economic progress. A number of the Productivity Teams from Europe have commented that “productivity consciousness” is more than mere intellectual acceptance; it is a real driving force in work. One of their reports finds that:

The one factor which more than any other has made for the high productivity of the U. S. is the attitude of its people towards work. Management and workers take an intense interest in output and efficiency. There is a widespread appreciation of the basic economic fact that high output means a high standard of living. Employees are keen to suggest means of improving methods and managements are always ready to try out ideas that may lead to greater efficiency.⁹

Thus expounded, the term “productivity consciousness” can be more readily understood. But we suspect that it is not as all-pervasive as some of

⁸ In a poll of factory workers, reported in *Fortune*, (May 1947), the question was asked: “What gives a person the best chance to advance in the plant where you work?” The majority responses were: “The quality of his work” and “his energy and willingness to work.” Little importance was assigned to such factors as “how good a politician he is”.

⁹ *Productivity Team Report, Letterpress Printing*, (New York: Anglo-American Council on Productivity, February 1951), p. 6.

our foreign visitors seem to think. And we are aware that these visiting teams viewed conditions in plants selected by the Mutual Security Agency from among exceptionally well-managed companies, since the purpose of the visits would thereby be served best. Perhaps a random selection would have brought different conclusions.

Probably the visiting teams compliment us too highly. Almost everyone can furnish illustrations of the practice of "nursing the job along", a practice which some investigators believe to be very common among employees (and one not limited to non-supervisory employees) in the factories and offices of America.

In actuality, then, both the "productivity consciousness" stressed by the visiting Productivity Teams, and the restrictions on output observed and discussed by other investigators, tell different parts of the story of American employee attitudes toward work.

Motivation and Performance

As in most realms of human behavior, there is wide variation in the conduct of people at work. It is not only a matter of intrinsic individual differences in the will to work—which are considerable—but even more important, the factors and conditions attendant upon work. When favorable, they more readily evoke earnest performance on the part of most people. When unfavorable, they discourage it.

Motivation for good work is a prime factor. Each of us works earnestly and well when he finds it rewarding to do so. To some, the most important satisfaction derives from the knowledge that their work is productive. This is an almost universal element in job satisfaction even among those who rank other factors more highly. But it is hardly to be considered all-powerful; with most of us, other motives must reinforce it.

Attitudes toward work understandably reflect personal experience. It is hardly surprising that irregularity of employment, characteristic among dock workers, for example, should result in considerable pessimism about the advantages of high output per man-hour; similarly with migratory farmworkers who regularly experience seasonal unemployment and often see new farm machinery displacing their labor. To groups like these, higher productivity may appear to be little more than a fancy name for the ancient foe called "speedup", with unemployment as its principal yield.

The Committee on Human Relations, a University of Chicago group, finds that their factual studies "demonstrate very clearly that restriction of output in some form exists in nearly all establishments, on all sorts of jobs, under all kinds of payment systems, and in unorganized as well as unionized plants. . . . I would go further [says a member of the Committee], and state that employees tend to limit output for fear of working themselves out of a job.

American workers have a conviction, gained through experience, that . . . except for brief periods of time such as a war emergency, there are not enough jobs to go around."¹⁰

Even if stable employment is assured, however, restriction of output may persist if it has become ingrained in the "custom of the trade". In fact, W. D. Evans observes that "it may even be enhanced, since there is a human tendency, not confined to workers, to make a good thing of it while you can."¹¹

Technological Change, Productivity and Employment

When technological advances occur in a static or declining market, the threat of joblessness, or of "downgrading" resulting from a reduction in the value of a skill, may loom large in the worker's mind. Faced with the prospect of a layoff, few can be zealous for productive efficiency, no matter what their rank in an enterprise.

Fortunately, however, technology generally advances most rapidly in industries with growing markets. Rising output per man-hour thus tends to be accompanied by rising employment in those industries. Similarly, periods of rising economic activity are generally periods of marked technological advance. These and other influences—above all, perhaps, the flexible framework of a dynamic and expanding economy—have tended to create a relatively favorable environment for the introduction of labor-saving techniques.

Illustrations to the contrary can be found, of course. If one's job security is threatened by a new machine or technique, his attitude can be expected to be hostile. Opposition sometimes finds expression in collective-bargaining agreements although in recent years union policy on labor-savings techniques has tended to shift, from outright opposition to demands to cushion the immediate impact of labor-saving innovations on the employees involved.¹²

Recognizing the Common Interest in Productivity

This shift is partly attributable to the increasing recognition that all have a common interest in raising productivity. Speaking to one of the British groups who came to survey our industrial methods, Clinton S. Golden, an "elder statesman" of the labor movement, discussed this shift in attitude as follows:

Two significant developments have taken place which have tended to cushion the impact of the introduction of labor-saving machinery and in

¹⁰ F. H. Harbison, "The Basis of Industrial Conflict", *Industry and Society*, ed. W. F. Whyte (New York: McGraw-Hill Book Company, 1946) p. 179.

¹¹ W. Duane Evans, "Productivity and Human Relations", *American Economic Review*, XXXVII, (May 1947), p. 415.

¹² U. S. Bureau of Labor Statistics, *Collective Bargaining Provisions: Union-Management Cooperation, Plant Efficiency, and Technological Change*, (Bulletin No. 908-10, 1948), p. 33.

turn change the attitude of workers and their organizations toward its introduction. The first of these is . . . unemployment insurance. . . . The second is a growing realization among workers that while the introduction of labor-saving machinery may temporarily displace some workers from the jobs they are accustomed to perform, in the long run the introduction of such equipment actually creates more jobs. At least, that has been our experience here in the United States. . . .

A third significant factor is related to the two developments I have just mentioned. That is, that with the expansion of labor organization membership, particularly in the past decade, workers have acquired a new confidence in their capacity to deal effectively and constructively with management regarding the impact of such mechanized equipment upon their jobs, employment opportunities, wages, and working conditions.¹³

The vital link between real wages and productivity has also been emphasized. John L. Lewis, for example, in a 1948 interview reported in *U. S. News and World Report*, declared:

The United Mine Workers recognized three or four decades ago that the only way to increase the standard of living in the mining industry was to create new values by greater productivity—more tons per man per day. . . .¹⁴

Mr. Lewis has spoken directly to his union in similar vein. At the 1948 convention of the United Mine Workers, after reiterating the view cited above, he compared the British coal industry with ours. In Britain, he said, one man-day of work yields one ton. From this meager return, “the industry must live”—pay wages, taxes and other expenses. In the United States, by contrast,

. . . we have a value of six tons of coal per day per man, and our wages and our profits to the investors and the cost to the consumer is measured on the basis of the value of six tons of coal instead of one. That is the reason we have . . . a wage structure three and a half times higher than Great Britain with a productivity that is six times as great, with a cost . . . of only one-third to the consumer of coal as against Great Britain.¹⁵

One of the most challenging statements about the common interest in rising productivity was made in 1947 by the Labor Committee of the National Planning Association. Members of this Committee included high officials of

¹³ *Productivity Report: Materials Handling in Industry*. (London: Anglo-American Council on Productivity, May 1950), appendix A. pp. 49-50.

¹⁴ *U. S. News and World Report*, (November 19, 1948).

¹⁵ *Proceedings of the 1948 Convention U.M.W.A.*, Vol. I, p. 16. In fairness to managers and men of the British coal industry, attention should be called to the marked superiority of the coal deposits of the U. S. A.

a number of the international unions, in addition to editors, economists, and other key men from the AFL, the CIO and unaffiliated unions. The statement read in part, as follows:

All parties to production and distribution—labor as greatly as any—have a stake in rising productivity. For rising productivity is the principal source of our economic progress and increasing well-being. Workers increasingly realize that high wages are made possible, and continuation of their rising trend can be insured only by, the high and increasing productive efficiency of our economy; businessmen increasingly realize that the answer to shrinking profits lies not in wage cutting, but in the increase of productivity.

. . . Not only improved personal efficiency of workers, but better management, better relations between labor and management, better machines, new products and new industries, better organization and methods, better information and broader research, better transportation and communication, and many other factors contribute to the increase of productivity. . . .¹⁶

Union leaders, in making such statements, express confidence in the average member's ability to understand "the importance of rising productivity to all Americans of whatever walk of life", as it has been put by Lazare Teper, Director of Research for the International Ladies' Garment Workers' Union, who adds:

Our future advances, just as in the past, will depend on the continued process of invention, on industrial adaptation of new methods or techniques, on the skills and aptitudes and application of workers, and on improvements in managerial functions.¹⁷

Fortunately, there is a growing understanding on the part of employees, and the public in general, of the fact that continued technological progress—new inventions, new methods, new products—requires vast outlays of new capital, and that this process makes possible more and better goods at lower prices to more people—a rising standard of living.

¹⁶ *Management-Labor Cooperation in Cutting Costs*, National Planning Association, Labor Committee, (Washington, D. C., August 1947).

¹⁷ Lazare Teper, "This Thing Called Productivity", *American Federationist*, (November 1948).

III. PRODUCTIVITY AND ITS DIMENSIONS

. . . measures of physical output per man-hour are only approximate.

—Solomon Fabricant

The Measurement of Productivity Change

BEFORE TURNING TO A DISCUSSION of the tasks of the future, it may be appropriate to summarize the findings of recent research on productivity changes—past and present—and to point up some of the measurement problems involved.

In recent years, research agencies, both private and governmental, have devoted increasing effort to measuring productivity change.¹⁸ The difficulties faced by the researcher are formidable, even in industries producing commodities such as sugar and flour which can be measured readily in terms of the physical quantity produced in a given period, and which remain fairly constant in composition and quality over time.

Types of Data and Their Limitation

In many manufacturing industries, comparisons over time are rendered almost meaningless by raw material, product, quality and style changes. Moreover, alternate ways of measuring production are often available. In metal mining, for example, shall we measure output in terms of ore tonnage or metal content? The two would show very different trends in output per man-hour as the richness of the ore mined varied.

For the construction industries, no satisfactory measure of physical output is available. In several other important segments of the economy, such as the trade and service industries, the very concept of “output” is nebulous. In these segments production is measured by value produced, as adjusted for

¹⁸ For a summary of current sources of productivity information, see, U. S. Bureau of Labor Statistics, *Major Sources of Productivity Information*, (June 1949, mimeographed).

changes in the price level so as to permit year-to-year comparisons in dollars of constant purchasing power. Value measurements of this type are also used for estimating output in the economy as a whole.

Estimates of labor input generally refer to man-hours paid for or, as in agriculture, to the number employed. Conventionally, all man-hours are treated the same, regardless of pay or skill. This may distort productivity data insofar as the skill composition of labor input changes over time is concerned.

In productivity measures for specific industries, man-hour data available generally cover only "production and related workers" or "wage earners" and exclude clerical, research, engineering, sales, advertising and managerial employees. This limitation introduces another possibility of distortion, particularly since the excluded groups account for an increasing proportion of the total labor effort expended in production.

The productivity ratio derived from estimates of output and input, respectively, is subject to all the errors and distortions of the component series. In fact, George Stigler points out that the productivity quotient is "likely to be more sensitive to errors of measurement because opposite errors in the indexes of quantity and employment are compounded: a 10 percent overstatement of output and a 10 percent understatement of employment will lead to a 22 percent overstatement of output per worker".¹⁹

The Dependability of Productivity Measures

The probability of a considerable margin of error is widely recognized. Solomon Fabricant, who directed a number of the pioneering studies of productivity made by the National Bureau of Economic Research, cautions that "even when derived from census and other extensive bodies of the most accurate and comprehensive data, measures of physical output per man-hour are only approximate."²⁰ The development of new techniques and the refinement of older techniques, together with the gathering of more nearly complete information, result in the revision of estimates from time to time. Continuing research may reduce present gaps in the data and supply findings more accurate than those now available but no more than a higher level of approximation is to be expected in any event.²¹

The reconstruction of the past is particularly difficult. Data for the years

¹⁹ George J. Stigler, *Trends in Output and Employment*, (New York: National Bureau of Economic Research, 1947), p. 46.

²⁰ Solomon Fabricant, "Of Productivity Statistics: An Admonition," *Review of Economics and Statistics*, XXXI, (November 1949), p. 309. See also, W. D. Evans and I. Siegel, "The Meaning of Productivity Indexes", *Journal of the American Statistical Association*, XXXVII, (March 1942).

²¹ Cf. Arthur F. Burns, *Production Trends in the United States since 1870*, (New York: National Bureau of Economic Research, 1934), p. 262: "Strict logic is a stern master, and if one respected it, one would never construct or use any production index."

prior to 1890 are few and far between and, given the fairly primitive statistical standards prevailing at the time, not adequate even for purposes of approximation. Data for the period after 1890 are somewhat less fragmentary but still represent only rough estimates, for the most part, prior to 1919, if not 1929. Nevertheless, the careful and comprehensive work of the National Bureau of Economic Research and other research groups has yielded much valuable insight into long-term productivity trends in the economy as a whole and in its several segments. There are, as yet, no equally dependable measures of year-to-year productivity changes.

The Pace of Productivity Change

For the economy as a whole, the consensus of research findings points to a long-run advance in productivity averaging roughly 2 per cent annually during the first half of the twentieth century.²² The pace of advance was far from uniform: war and depression brought a slowing-down in some periods, while the rise of great new industries, the introduction of new production and management techniques, and a host of other changes brought a relatively rapid rise in others.

Cumulatively, however, the gains have resulted in a prodigious increase in productive power which has been the major force in raising consumption standards and in permitting a sizeable increase in the time available to Americans for leisure and recreation.

Shifts in Labor Force

Two important features of this record of productivity gains should be noted. To begin with, it reflects more than the greater efficiency achieved in the production of goods and services. The upward trend in productivity has also been influenced by the shifting of labor from the farm to other sectors of the economy. Between 1930 and 1950, for example, the farm labor force

²² Mills puts the rate at 2.2 percent (Frederick C. Mills, "The Role of Productivity in Economic Growth," *American Economic Review*, XLII, May 1952, p. 546). The Council of Economic Advisers, in its annual economic review for 1950, estimated the long term growth in productivity at ". . . about 2 or 2½ percent, annually compounded . . .", (*The Economic Report of the President*, January 1950, p. 78) Fabricant suggests that the long-term rate of gain may lie between 1.6 percent and 2.2 percent. Emphasizing the caution with which estimates of productivity trends must be viewed, he points out that the long-term rate ". . . can be derived only from deflated national income series that are rough approximations prior to 1919, if not 1929; rough estimates of employment that are based on incomplete payroll statistics with gaps filled in from the Census of Occupations adjusted for unemployment; and very crude estimates of changes in the length of the work week. No one familiar with the basic data would call the final estimate precise." (Fabricant, "Of Productivity Statistics: An Admonition", *op. cit.*)

declined by about one-third; the proportion of the experienced labor force with farm occupations from 21 percent to less than 12 percent.²³

Other shifts of labor (as well as of other productive factors) have no doubt influenced the trend—shifts toward industries having a relatively high level of output per unit of labor input. Shifts of this sort would result in a rise in aggregate productivity, even though no change in productivity occurred within the component industries. This is not to say that such a rise is unreal. But the continuance of the influence will depend upon the continuance of the shifting. And, of course, shifting in the opposite direction would have a retarding influence on the productivity trend of the total economy.²⁴

Gains Unrecorded

Secondly, the increases in output per man-hour tell only part of the story of the gain in efficiency achieved. Improvements in the quality of goods and services largely elude measurement. Changes in quality have almost no influence on productivity data based on physical units. Nor does the value approach assuredly fill this gap, since many changes in quality are not accompanied by cost changes.

Long-term improvements in quality have been an important feature in almost all segments of the economy, although we often tend to think of them as being confined to manufacturing and the services. It is clear that a trip from New York to Chicago in the coach of a streamlined train is a very different experience from a trip over the same line forty years ago. Yet each of the two is counted as 900-odd passenger-miles, in computing productivity in railroad transport.

Changes in the quantity of fuels or raw materials required for production represent another form of change in efficiency which productivity indexes, when expressed in terms of output per man-hour, fail to take into account. Productivity data thus understate the gain in over-all efficiency if raw material is saved without appreciable effects on output per man-hour. For example, the pounds of coal required for steam locomotives on railroads, per thousand gross freight miles, was reduced from 169 to 119 during the two decades 1916-1936.²⁵ In other words, fuel efficiency on steam locomotives

²³ U. S. Bureau of the Census, *Statistical Abstract of the United States: 1953*, (Seventy-fourth edition), 1953, p. 184.

²⁴ This influence is given careful analysis in *Productivity: Gauge of Economic Performance*, (New York: National Association of Manufacturers, 1952).

²⁵ Solomon Fabricant, *Labor Savings in American Industry, 1899-1939*, "Occasional Papers", 23; (New York: National Bureau of Economic Research, November 1945), p. 20. This summary of National Bureau studies on productivity is also the source for all of the figures cited below for the first four decades of the 20th century. Percentage productivity gains have been computed by the writer as reciprocal values of the original data for wage-earner hours or employment per unit of output.

increased nearly 43 per cent during this period. Similar savings in other industries represent another dimension of gain in over-all efficiency in the use of resources.

The Pattern of Change

Wherever productivity can be measured, whether in manufacturing, mining, agriculture, or public utilities, the long-run movement has been upward. The pace of productivity increases, however, has been far from uniform among the several sectors of the economy. And we find even greater diversity when we look at the productivity trends of individual industries within manufacturing or any other of the major industrial groupings.

MANUFACTURING AND MINING

Comprehensive productivity studies of segments of the economy cover only the first four decades of the century. During this period, the rate of increase was greater in some sectors than in the economy as a whole. In manufacturing, for example, the annual gain averaged about 3 percent; in mining, 3.6 percent. The rise was almost continuous in both sectors, at least between 1919 and 1939; only three of these inter-war years saw productivity decline in manufacturing, and the declines were slight. In mining, every year recorded a gain.

The productivity gains indicated for these major industry groups include, of course, the effects of labor shifts from industries in which the value of output is relatively low to industries where it is relatively high. While this element accounts for a very minor part of the long-term productivity rise in manufacturing, it represents a major factor in the gains shown for the mining group. This reflects the sharp relative growth in oil and gas production, in which the value of output per man-hour is considerably higher than in most other mining industries.

At the 3.6 percent rate, mining productivity rose by 270 percent between 1902 and 1939, but if we take only the rise in productivity due to improvements in the productive efficiency of the several mining industries, the total rise in productivity is reduced to 194 percent. Thus almost three-tenths of the total rise in output per man-hour in mining is accounted for by the shift in composition of mining output, i.e. by the sharp growth of oil and gas production relative to other mining industries.

AGRICULTURE AND PUBLIC UTILITIES

For the public utilities and agriculture, man-hour data are either not available or cover only the latter part of the four decades under view. Data on long-run productivity changes in these two major industry groups are con-

sequently expressed in terms of output per worker. In both, productivity rose at an average rate of somewhat less than 2 percent annually.

In electric light and power production, however, the increase in output per worker averaged 4.7 percent annually over the four decades. This industry also experienced sharp gains in the efficiency of fuel utilization: the output of kilowatt hours per ton of fuel was multiplied by five from 1902 to 1939.

OTHER MAJOR INDUSTRY GROUPS

In some of the important parts of the economy such as commerce, finance, construction, and the services, the rise in productivity appears to have been below the average rate of 2 percent annually, while in other large sectors the rise was well above 2 percent. Of course, all the figures are approximations, but it is hardly to be expected that productivity in such an activity as education or personal service would keep pace with productivity in manufacturing or mining or railroading where machine technology counts so heavily. However, if quality improvements could be taken into account, the production of intangibles, notably services, might show a more rapid rise in man-hour output than is presently apparent.

DIVERSITY WITHIN MAJOR GROUPS AND COMPANIES

Wide variations in the rate of productivity change are to be found within each of the major industry groups. Since data are most complete for the manufacturing group, the diversity of trends may be best illustrated by examples for this segment of the economy.

Few industries progress at exactly the average rate of 3 percent annually which we find for manufacturing as a whole. During the period 1909-1937, productivity increased at 9.3 percent annually in the manufacture of autos and parts; the rate was 7.1 percent in tobacco products, and 5.6 percent in glass. At the opposite end of the scale, the rate was only 0.6 percent in meat packing, and 0.9 percent in railroad car-building. In several industries, productivity fell, although the result might be different, as in locomotive building, for example, if quality changes could be measured.

The choice of a span of years other than 1909-1937 would doubtlessly alter the result in many cases. Some industries had already passed their peak rate of growth prior to 1909.²⁶ Others, automobile manufacture, for example, were just entering the mass-production stage.

In general, new industries experience the greatest increases in productivity. Between 1919 and 1939, productivity rose 180 percent in auto manu-

²⁶ Cf. Simon Kuznets, "Retardation of Industrial Growth", *Economic Change—Selected Essays in Business Cycles, National Income and Economic Growth*, (New York: W. W. Norton and Company, 1953), pp. 253-277.

facture, 290 percent in oil refining, and over 300 percent in rubber tires. Chemicals and rayon showed equal or greater gains.

However, productivity in certain older industries, glass and knit goods manufacture and, in the 1930's, cigar manufacture, for example, made striking advances under the impetus of major innovations.²⁷

Detailed study of a given industry reveals that the disparity among companies is even greater than among industries. Productivity may be rising rapidly in some companies, while there is no gain at all in others. Concerns which lag behind for too long a period presumably do so at their peril; the newer methods of the more progressive concerns must, in the course of time, be adopted by all firms which are to endure. This process can be observed in almost any industry where technical innovations are introduced; the latter carry their influence over a number of years, as new plant and equipment replace the old. Seldom is an innovation adopted by all, immediately after its first appearance.

Productivity Trends

AFTER 1940

World War II put a brake upon the rise of productivity. It is impossible to define the trends in precise form for several reasons. Several censuses were omitted between 1939 and 1947; thus a chief source of data is unavailable. Annual estimates of Gross National Product are prepared by the U. S. Department of Commerce, but the composition of this huge aggregate was so different from that of preceding years that it is of dubious value as a basis for computing a productivity figure to be compared with the years prior to 1940.²⁸

WARTIME TRENDS

Doubts about the data for 1940-45 are too great to permit anything except rough approximations, somewhat as follows:

In the war industries, productivity increases were spectacular after the first year or two. This would be expected in any industry which passed from

²⁷ Cf. W. D. Evans, *Mechanization and Productivity of Labor in the Cigar Manufacturing Industry*, (Bureau of Labor Statistics, Bulletin No. 660, 1939); also, Boris Stern, *Productivity of Labor in the Glass Industry*, (Bureau of Labor Statistics, Bulletin No. 441, 1927).

²⁸ Gross National Product includes governmental activities, which are measured in large part by governmental payrolls. To include these with the private part of the nation's productive effort injects an elusive element indeed. Furthermore, to adjust Gross National Product data for price-level changes is especially difficult in wartime. The Bureau of Labor Statistics which supplied a productivity index for "all-manufacturing" up to 1939, discontinued the index in 1940. The Bureau has prepared indexes for a number of manufacturing industries for the period since 1940 but refrains from aggregating these, since they are not deemed sufficiently representative of manufacturing as a whole.

the custom-order stage to the mass-production stage very rapidly, as did the ship-building and aircraft industries. The unfavorable factors—the influx of untrained people, high turnover of labor and supervision, three-shift operation, shortages, over-manning—were outweighed by the enormous advantage of repetitive production. One “tooling-up” sufficed for scores of ships, and for hundreds of planes; special-purpose machines, simplified and specialized operations, and other techniques of mass production made it possible to score remarkable gains in productivity, in some industries as high as 40 or 50 percent within one year.²⁹

In low-priority industries, productivity sagged. New equipment was usually impossible to procure, and old machinery had to be strained to the limit. Labor turnover was high. And in some industries, brick and tile for example, the rate of operation fell to a point where efficiency was out of the question.

The experience of the brick and tile industry points up one of the important characteristics of productivity changes: in the short-run, productivity can be significantly affected by production volume. With any given complement of plant, equipment and other relatively “fixed” production factors, as volume rises (within limits), it will automatically be accompanied by a rise in output per man-hour since labor costs for “overhead” functions, and probably also for direct labor, rise less than proportionately.³⁰

On the railroads, for example, output (revenue traffic) per man-hour increased 40 percent between 1940 and 1944 as a result of the continuous use and complete loading of cars.³¹ Similarly, productivity increases resulting from rising volume probably occurred in retail, cleaning, repair and other consumer-serving industries although only at the cost of a substantial deterioration in quality.³²

THE POST-WAR YEARS

At the war's end, the problems of reconversion affected productivity adversely. Industries differed markedly in their experience; but, for many, the shortage of materials and scarcity of new equipment negated much of the advantage which would otherwise have been derived from the return of experienced men to their jobs, and from the high level of plant operations

²⁹ See “Productivity Changes Since 1939”, *Monthly Labor Review*, (December, 1946), reprinted as Serial No. R1854, U. S. Bureau of Labor Statistics.

³⁰ Julius Hirsch, “Productivity in War and Peace,” *American Economic Review*, XXXVII, (May, 1947), 401-3.

³¹ U. S. Bureau of Labor Statistics, *Productivity Trends in Selected Industries: Indexes Through 1950*, (Bulletin No. 1046; October, 1951), p. 28.

³² Hirsch, *op. cit.*

called for by the high demand for goods. For the entire economy, productivity appears to have declined slightly during the first two years of peace.

Following 1947, productivity began to rise once more. The experts caution us, however, against putting too much reliance on measures of short-term productivity changes, since the margins of error in the indexes can exceed the actual changes in productivity. But if we take 1929 and 1949 as bench-mark years—both were peace-time years of nearly full employment—it appears that the historic rate of rise in productivity, averaging about two percent annually, was achieved during that twenty-year span. This is the conclusion reached by Department of Commerce statisticians, who base it upon estimates of the real gross product of the private (non-governmental) part of the economy, adjusted for changing values of the dollar.⁸³

The Prospect Before Us

Some Negative and Positive Influences

Of the factors affecting productivity, there is only one that must inexorably have a retarding influence. This is the continuing drain upon natural resources. Mankind faces the prospect of having to turn to inferior sources of mineral supplies in years to come. The steady increase of population would make this inevitable, even if living standards were not rising. The operation of this “principle of decreasing returns” is evident in the coal industry of Britain and other lands where the effort required to bring a ton of coal to the surface has greatly increased, over the years. Similarly with certain non-ferrous metals in our own country.

Science has done wonders in countering this influence: we have found new ways to use resources more economically, to exploit lower-grade minerals and to recover materials previously wasted. Even greater achievements may lie ahead. Nevertheless, the influence is there, warning us against profligate use of any materials that come from the earth, warning especially against that most tragic of all wastes of both material and life, war.

Other retarding influences can be seen at work in various parts of the world. They could emerge in our own country if we should be so unwise as to permit them to do so. A climate of opinion hostile to innovation, to enterprise, to competition, to the investment of risk capital, or to the expansion of

⁸³ “Estimates of Gross National Product in Constant Dollars, 1929-1949.” *Survey of Current Business*, (January 1951), pp. 6-11. See also “National Productivity and Its Long-term Projection” by John W. Kendrick, a paper for the Conference on Research in Income and Wealth, National Bureau of Economic Research, May 1951; and, *National Income and Product of the United States, 1929-50* (U. S. Department of Commerce, 1951) p. 2.

markets, could hamper productivity gravely.³⁴ Trends in such direction have a tendency to appear in time of depression, a fact which enhances the importance of techniques to moderate fluctuations in over-all economic activity.

Nor can we overlook the retarding influence of monopoly powers—equally detrimental whether exerted by employers or unions.

Barring untoward developments such as those just referred to, the factors favoring a rise in productivity can be expected to continue exerting their influence in the future as in the past. Average levels of health and education may be expected to continue their long-term uptrend. Training will be better, and will be received by ever larger numbers of people—training in mechanical skills and in administrative techniques as well. More and better equipment will continue to be supplied by the application of savings to investment. Stimulus to effort will continue to be supplied by incentives, tangible and intangible.

Above all, the application of science to production problems may be expected to continue growing in scope and intensity. As in times past, this must surely continue to be the chief influence favorable to productivity.

Its influence may well be accelerated in the future. New areas of research are opening up, and an ever-increasing proportion of the total productive effort of the economy is devoted to research.

AUTOMATION

In manufacturing, emerging developments may yield enormous gains. Only yesterday, a new word was coined—"automation". It is expressive of new emphasis upon a technique long practiced in the manufacture of certain products such as cigarettes and electric-light bulbs—*automatic control* of operations mechanically performed.

Machines have long been guided by mechanical controls (cams, templates, hydraulic pistons) and by electric devices (relays, solenoids). Now there is added a new vast field of electronic controls, adaptable to thousands of repeti-

³⁴ The significance of the climate of opinion was cogently set forth by *The Times* of London in editorial analysis of the obstacles standing in the way of a major increase in British production. Said *The Times*, in part:

"... On both sides of industry there are all too frequently a lack of enterprise, vigour and adaptability, an obsession with security, and unwillingness to compete, to take risks or to emerge from the protective shells of price-rings, quota-agreements or established trade union rules. Even an increase in industrial capital development and re-equipment, on which, among other things, a major advance in production depends, is limited in many places by attitudes in industry itself rather than by a lack of savings. Too often re-equipment is inhibited by the reluctance of organized labour to permit economies of man-power to be realized and by the reluctance of capital to risk the outlay involved—and, of course, by the interaction of these two attitudes on one another . . ."

[“Tasks for 1954,” *The Times* (London), January 1, 1954, p. 9].

tive tasks which now require human control. The transistor, the computer, the printed circuit, the magnetic amplifier, and other devices may do for the factory, what thermo-control has done for the household in automatizing furnace control, refrigeration and air conditioning.

The "automatic factory" is not likely to become typical within a short span of time. Yet even those who point to the limitations of automation and doubt that it should be deemed a "Second Industrial Revolution" (as some have termed it), see it as an evolutionary development having immense possibilities.³⁵ As man's productive power has been immensely increased through utilizing mechanical power in place of human brawn, so can the effectiveness of man's skill and mental effort be multiplied by using control devices in place of the human eye and hand.

If these striking developments can begin to yield their fruits in this sixth decade of the century they will be timely indeed. The low birthrate of the Nineteen-Thirties is reflected in the declining rate of growth of the labor force; meanwhile the population grows apace. The challenge to our productive power will be great if we are to raise living standards at home and meet our commitment to aid friendly peoples overseas. The need for accelerating the rise in productivity is very real.

Influences Favoring Productivity Interrelated

Factors influencing productivity rarely, if ever, operate in isolation. Progress in automation, for example, results from the combined effect of the inventor's genius; the skill of engineer, manager and craftsmen; and investment in research and equipment.

Almost every substantial innovation is the culmination of many steps, accumulated and brought to fruition in the machine or method which increases productive efficiency. Each forward step is possible only because of the many forward steps that preceded it.

Thus the gains in productivity achieved in various parts of the economy relate to each other, reinforce each other, and make further gains possible. Progress in one industry may be greatly furthered by progress in other industries which serve it. Productivity in machine-tool manufacture may not show remarkable gain in recent years, but the products of that industry have helped to increase productivity in many other industries dependent on machine tools.

The oil industry shows substantial gains in productivity and can justly claim a measure of credit for improved efficiency in the many industries it

³⁵ See, for example, the round-table discussion of automation reported in; "The Automatic Factory", *Fortune*, (October, 1953). Also, "Electronic Data Processing", *Research for Industry*, (Stanford, California: Stanford Research Institute, November, 1953).

serves; in turn, it has been aided by the heavy machinery industry and others, as well as by the research findings of many laboratories.

Because the influences upon productivity are so interwoven and depend so much upon the vitality of our economic system, it may be truly said that the basic cause of rising productivity lies in the system itself, together with the rich heritage of science and technology which is the common possession of all.³⁶

The Distribution of Productivity Gains

If productivity rises at an average annual rate of two percent, output per capita can be doubled every 35 years.³⁷ At that rate, each generation can achieve a level of living twice as high as that of its predecessor. In what form have the gains been taken in the past, and how have they been shared among the producing groups and consumers of the nation?

INCREASED LEISURE

A substantial part of the gain from higher productivity has been taken in the form of greater leisure. Average working hours per week fell by one-third between 1900 and 1950—from nearly 60 hours to 40 hours; in addition, vacations have become very much more general and holiday observances increased.

This great change constitutes a rise in the level of living in a very real sense. But, like changes in quality of products and services, it eludes measurement in financial terms.

What this increased leisure has cost in terms of goods and services foregone cannot be determined. Of course, the shortened work-week has contributed to the rise in man-hour output, as well as being one of the important benefits derived from it. There may be disagreement as to whether man-hour

³⁶ Cf. Kuznets, "International Differences in Income Levels", *op. cit.*, p. 243, footnote 8: "Many aspects of the interrelation between an effective adoption of the industrial system and private enterprise-political democracy, argue for its dissolubility. The drive for profit and personal gain that animates economy under private enterprise; the supremacy of the consumer in a political democracy; the fostering of a spirit of inquiry and critical examination of evidence—are all powerful means of breaking resistance to change, encouraging extensive application of knowledge, and building industrial society on the lasting and solid base of a high standard of living of ultimate consumers. In contrast, the recent experiments in grafting the industrial system to a society deprived of personal freedom and with the ultimate consumers' needs forcefully subordinated to state imposed goals, seem much less effective—particularly as bases for peaceful economic growth for the long run."

³⁷ (This of course is based on the assumption that the other determinants of per capita output remain neutral, i.e., that there is no substantial change in the level of employment, the length of the work-week, or the proportion of the population in the labor force.)

output is highest at 44 hours, 40 hours, or 36 hours per week. Studies in this field show different results for different kinds of work.³⁸ But no one doubts that output per hour is substantially higher at 40 hours per week than at 60, and somewhat higher than at 48.

It may be doubted that reduction of hours below 40 yields much gain in output per hour; further research in this field may furnish more conclusive evidence than is now available. The trend toward fewer working hours per year may continue, and it would be well to know whether each reduction can be expected to yield correspondingly less output, or whether it will bear a part of its cost by contributing to higher productivity.

EFFECT ON PRICES

Rising productivity has resulted in higher incomes rather than in a lower level of prices. To be sure, prices of individual products may be reduced as increased efficiency lowers production costs. The average retail price of electric refrigerators, for example, fell from \$550 to \$152 between 1921 and 1940, the last year prior to the World War II inflation—and the product had improved substantially in capacity, efficiency and durability in the interim.³⁹ Similarly striking reductions have occurred in the prices of other electrical household appliances and other products. High productivity has made possible price reductions which, in turn, resulted in a rising volume of sales, wider distribution and higher employment in the growing industries.

The long-term trend of general price levels, however, has not been pulled downward by labor-savings. Nor is there evidence that short-term, “cyclical” movements of the general price level are related to productivity changes. Other factors, primarily monetary and fiscal in character, must be looked to in explaining the course of the price level.

WORKERS REAP MAJOR BENEFITS

Although not all groups in the population have shared equally in the gains, there has been a wide diffusion of the benefits of higher productivity. To the largest group of all—earners of wages and salaries—the gain in real income (money income adjusted for changes in the value of the dollar) has been in very close proportion to the rise in productivity in the whole economy.⁴⁰ Real

³⁸ See U. S. Bureau of Labor Statistics, *Hours of Work and Output*, (Bulletin No. 917, 1947.)

³⁹ U. S. Bureau of Labor Statistics, *Cost Savings Through Standardization, Simplification, Specialization in Electrically Operated Household Appliances*, (Prepared for Productivity and Technical Assistance Division, Mutual Security Agency, November 1952), p. 34.

⁴⁰ Cf. *Productivity: Gauge of Economic Performance*, (New York: National Association of Manufacturers, 1952), p. 32.

hourly compensation has doubled, as productivity has doubled about every 33-35 years

That fact has an obvious relation to the stability of what is often referred to as "labor's share" of the national income—the share paid as compensation to wage-earners and salary-earners. For years, this share has constituted about 60 percent of the private national income (national income excluding government payrolls) and has fluctuated within a relatively narrow range.⁴¹

Among other groups—farmers, professional people, proprietors—real incomes likewise have risen with rising productivity, though with a lesser degree of conformity to the latter than in the case of employees. Recipients of interest and rent have lost, rather than gained, for two decades or more.⁴²

EMPLOYEE INCOME RESPONSIVE TO OVERALL GAINS

There is not much linkage between the productivity of *any one industry* and the incomes of those engaged in that industry. Rather, real earnings have risen in proportion to the rise in productivity *in the economy as a whole*.

It is fortunate that things have worked out in such a way. Otherwise, the wage and salary structure would be full of absurdities and inequities; the people engaged in industries where technology has advanced rapidly might be receiving incomes ten times as great as those doing work of equal skill and effort in industries or occupations where the advance has been at a lower rate or wholly absent.

Further, if the gains from rising productivity were wholly captured by those engaged in the industries experiencing the increase, there would be little scope for reducing the price (or lowering price relative to other prices) of any product or service. Thus the growth of the industry might be retarded, since it is through increased sales, stimulated chiefly by lowered prices, that an industry expands. There is also the need for adequate return on capital investment.

⁴¹ Cf. U. S. Department of Commerce, *Survey of Current Business*, ("National Income Supplement", 1951), p. 17. For the 22-year period 1929-1950, the compensation of employees ranged between 58 and 62 percent of the private national income in 14 years. Labor's share exceeded 62 percent in four years (1931-1934) and fell below the 58 percent mark in four years (1929, and 1941-1943). One further point may be noted. Although the term "labor's share" is commonly used as though it were identical with "compensation of wage-earners and salary-receivers", a large part of the income of farmers and other self-employed persons represents compensation for labor effort. If this element were included, labor's share would be substantially higher than 60 percent. On the other hand, insofar as some of the salary payments made to owner-proprietors include an element of return on invested capital, the figures overstate labor's share.

⁴² It is not to be implied that rising productivity is connected with declining incomes from rent and interest.

THE PROCESS OF ADJUSTMENT

Clearly, in industries where productivity rises at more than the average rate, prices of products ought to fall so that the gains can be shared with consumers. Typically, this does occur, *must* occur if competition is active. Expansion of employment and investment in those industries then follows. Wages are likely to be raised to attract labor needed to expand production. Other industries—even those in which productivity has not been rising at all—may find it necessary to raise wages sooner or later and higher prices follow. Thus, the result of these changes is a rise in the wage-level (with the progressive industries tending to be out in front) and a shifting of the price structure, some prices being lower and some higher.

This averaging-out process does not operate smoothly, nor does it always yield equitable results. Higher gains accruing to those favorably situated may persist for some time. The callings not affected by technological improvements—teachers, clergymen, public servants and the rest—may lag behind. More study of the relationships between incomes in the many occupations will be needed before we can wholly explain the way in which productivity gains are shared. No doubt there is a continuous process of adjustment: benefits long over-due may lead to higher-than-average gains to a given group at a given time.

When the price-level is changing rapidly, as in the 1940's, the pattern of adjustment is especially complex. Real earnings per hour in all manufacturing rose about 30 percent between 1939 and 1949, but in the textile industry the rise was 48 percent; in the auto industry, only 14 percent. In general, during the 1940's, there was a tendency for lower wage-rates to rise proportionally more than higher wage-rates, not only as between industries but as between occupations within an industry.

Intricate and imperfect though the adjustment process may be, it seems to have diffused the benefits from rising productivity very widely. Spectacular gains in productivity in some industries have tended to yield moderate gains to all, or nearly all, rather than being limited to those working (or investing) in these segments of the economy.

Wage Changes and Productivity

While productivity and real wages tend to rise together, a change in the one does not, at once, necessarily bring about a change in the other. Wages would fluctuate in an untoward fashion if closely geared to short-run productivity changes.

Productivity may at times decline for reasons quite beyond the control of wage-earners. A decline may occur in a period of rising prices when

money wage-rates are likely to be raised rather than lowered.⁴³ This was the situation in 1945-46 when wage increases were granted without regard to the fact that productivity was declining. Indeed, there is rather general agreement among statisticians that average real wages rose during 1940-1949 considerably more than productivity, with a rise of about 30 percent in the former and scarcely half as much in the latter. Debate would probably be brisk as to whether this was a delayed payment of gains accrued during earlier years or an advance against gains yet to come.

Higher wages would be expected to *follow* a rise in productivity, rather than *precede* it, yet this is not inevitably the case. Wage increases may come first, applying pressure upon an employer to institute improvements which will raise productivity and thus prevent the wage increases from hampering the healthy functioning of the enterprise.

Presumably, such "advance payments" could not be carried very far without promoting a rising spiral of prices. Understanding this, certain labor economists have stressed the importance of relating wage demands to higher output per man-hour, "the basis of higher living standards . . . a wage increase which is paid for by rising productivity means real gain for workers" in periods of stable price-level.⁴⁴ The British Trades Union Congress of 1952 voted approval of the position taken by the General Council of the Congress:

As regards the effect on industrial costs, it is clear that in the absence of a rise in productivity, which cannot be expected to occur quickly, substantial wage increases are bound to raise costs. . . . (An) appreciable increase in the cost of our exports at the present time might have the most serious consequences for our standard of living.⁴⁵

THE "ANNUAL IMPROVEMENT FACTOR" PRINCIPLE

Average real wages, as we have seen, have risen in approximate conformity with the rise of productivity in the economy through the working of market forces. Would it be sound policy to provide for a regular annual increase in real wages commensurate with an historic (and anticipated) average annual rise in productivity?

⁴³ Clark Kerr, "The Short-Run Behavior of Physical Productivity and Average Hourly Earnings", *Review of Economics and Statistics*, XXXI, (November 1949, pp. 299-309.

⁴⁴ *Labor's Monthly Survey*, (May-June, 1949). The AFL first stressed productivity as a basis for sound wage demands in its 1925 and 1926 conventions, and has tended to adhere to this policy since that time. Emphasis is of course put upon the positive side, — "increase the real wage in step with productivity" — rather than the restraining side — "hold wage demands to those which can be justified by increased productivity". However, the latter emphasis has not been lacking in trade union journals of recent years.

⁴⁵ *New York Times* (September 5, 1952), p. 4.

An affirmative answer to that question was put forward by General Motors Corporation in its 1948 negotiations with the United Auto Workers (CIO). The principle was accepted and made part of its collective agreement of that year. Two years later, it was renewed in the five-year contract negotiated in 1950. Shortly after this contract was signed, war broke out in Korea, releasing a combination of forces which influenced a considerable number of employers and unions to shape their agreements after the General Motors-UAW pattern. The brisk ensuing debate over the soundness of the plan was intensified upon the inauguration of wage stabilization in 1951.

THE GM-UAW CLAUSE

The "improvement factor", or as it is often termed, the "productivity increase", included in the GM-UAW agreement reads as follows:

The annual improvement factor provided herein recognizes that a continuing improvement in the standard of living of employees depends upon technological progress, better tools, methods, processes and equipment and a cooperative attitude on the part of all parties in such progress. It further recognizes the principle that to produce more with the same amount of human effort is a sound economic and social objective. Accordingly, all employees covered by this agreement shall receive an increase of 4 cents per hour, effective May 29, 1950, and an additional increase of 4 cents per hour annually [thereafter, in each year of the 5-year contract].⁴⁶

No pledge of cooperation for higher efficiency is undertaken by the Union, although a general recognition of the need for "a cooperative attitude on the part of all parties" is implied. The management of General Motors has always assumed full responsibility for increasing efficiency and no change on that point is explicitly spelled out in the above-quoted clause.

Nor is the annual 4 cents per hour raise intended to reflect the anticipated rise of output per man-hour in the company's operations. Four cents per hour is stated to be about 2½ percent of the average base wage-rate at GM. Productivity in automobile manufacturing rose at a far higher annual rate than 2½ percent during the years for which data are given, and it is safe to assume that GM's experience was at least as favorable as the industry's average.

The rise of productivity in *the entire economy* is thus taken as the basis for the annual improvement factor: the figure set in 1950 approximates a 2½ percent rate (the 1948 figure of 3 cents was roughly 2 percent of the average base wage then prevailing). Officials of the Corporation have frankly ex-

⁴⁶ Quarterly allowance for changes in the BLS Consumers' Price Index also is provided in the contract. The improvement increase (as well as the basic wage) is thus protected against absorption by a rise in the general price level.

pressed belief that a higher rate of productivity rise will continue to prevail in their operations, permitting room for product improvement and better values to customers.

Industrial peace for a five-year period was clearly a main objective of management, and perhaps of the Union as well. The Company felt safe in promising, and the Union was ready to accept, a series of automatic increases, moderate in annual amount, yet adding up to a substantial sum over the five-year period.⁴⁷ Assurance of freedom from strife during the life of the contract, (except that, as in earlier contracts, a strike may be resorted to in unsettled disputes over production standards) was an important part of the bargain.

Respect must be accorded the reasoning which underlies the "GM Formula", as it has come to be termed. For one thing, it is significant that an aggressive union agrees that the productivity experience of the entire economy, rather than that of the particular industry or company, is the basis on which real wages can be expected to rise. The case for the widest possible diffusion of the fruits of higher productivity need not be restated at this point. Let us recognize how important it is that the principle be generally understood, not only by those of labor and management who negotiate agreements, but by their constituents—union members and stockholders both. To be sure, each set of constituents expects its agents to "bring home the bacon" from time to time, an expectation which does no harm so long as it remains within the limits of what can be soundly attained.

To be respected, too, is the search for criteria of wage adjustment which may serve, better than sheer bargaining power has done, to promote industrial peace and sound relations between employers and employees. A criterion which bends collective bargaining toward a search for facts and evidence rather than the use of tactics of power would be an immense gain, both in reducing industrial strife and in the negotiation of agreements which, because they are more likely to be fair than those reached via the power struggle route, win support.⁴⁸

⁴⁷ Cf. Frederick H. Harbison, "The General Motors-United Auto Workers Agreement of 1950", *The Journal of Political Economy*, LVIII, (October, 1950), 406: "This guarantee exceeds the increases in real wages during World War II. Consequently, a *guaranty* of a 20-cent real increase for the next five years undoubtedly represents the greatest economic gain secured by any union in the mass production industries in the past decade. . . ." (Italics in the original).

⁴⁸ Of course, adoption of the "annual improvement factor" principle does not necessarily mean "contract-by-formula". The 1950 GM-UAW contract represented a "package agreement" of which the annual improvement factor was only a part. In addition, Harbison finds that the 4-cent annual increase reflects a compromise between a union demand for a 5-cent increment, and the GM proposal to continue it at 3 cents. See, *Ibid.*, pp. 398-399.

SOME QUESTIONS ABOUT THE GM FORMULA

But it is greatly to be doubted that the "improvement factor" formula can fill the need. It is one thing to expect that the working of economic forces in the market-place will bring about, in the future as up to now, substantial conformity between aggregate productivity and real wages, over the span of the business cycle.

It is quite another matter to expect that a uniform annual increase in wages can be guaranteed by employers generally, or that unions can generally deliver their members' continued acceptance of such a guarantee as "payment in full", year after year.⁴⁹ (The General Motors agreement of 1950 had run scarcely three years of its five-year term when the United Auto Workers sought upward revision of several of its economic terms, including the improvement factor. The latter was raised to five cents per annum.)

Even if it were financially possible for employers generally to commit themselves to annual increases for relatively long periods, and for unions to make the correlative commitment, economic disadvantage to the national economy might result.

There are good reasons why wage rates might rise at above-average rates in some parts of the country or in some industries, while remaining stable in others. Transfer of workers from areas of excess supply to areas of scanty supply is thus encouraged, and the national product is enlarged; similarly with shifts between industries, and with the entry of new workers into expanding industries and occupations.

Differential rates of change in wages are inevitable in an economy as complex and dynamic as ours. The effect may be—has often been, in recent years—to lessen the spread between the low-wage and the high-wage industries and districts. This sort of development might perhaps be thought of as correcting previous inequities, the paying of delayed installments of productivity gains.

These considerations do not add up to censure of agreements including regular increases in wage rates. Such an agreement may be suitable when an

⁴⁹ In an appraisal of the 1948 GM-UAW agreement, Ross comments: "The difficulty with a 'mechanical formula' is that there is nothing for the union to deliver once the formula has initially been adopted." (Arthur M. Ross, "The General Motors Wage Agreement of 1948", *Review of Economics and Statistics*, XXXI, February, 1949), p. 7.

employer and a union feel confident of its soundness.⁵⁰ Experience through the years may show what conditions make for the feasibility of the plan, and what conditions undermine it.

Wage Formula and Wage Policy

There are strong reasons, however, for believing that it would be very undesirable to have the productivity increase principle molded into a uniform pattern. Decisions on wage policy, both by employers and by unions, must be influenced by a number of factors—including the market outlook, comparative wage levels, the relation between costs and prices.

The course of productivity within a given firm is an important factor entering into management decisions on wage policy, but it may be necessary to raise wages when productivity in general is not rising, or is even declining, as in 1946. During 1949, though productivity was rising, wage increases were not commonly granted; indeed, given an unfavorable market outlook, there were certain reductions through arbitration.⁵¹

Apparent anomalies of that sort may be required by economic considerations that count more heavily, in year-to-year decisions, than the current trend of productivity.⁵² The long-term tendency of real wages to rise in substantial conformity with productivity seems to have been strong enough to even out the irregularities.

No doubt there is no more than rough justice as between industries, occupations and areas, even in the long run. But the process has a certain flexibility that permits correction of arrearages, when conditions are favorable. On the whole, it has yielded results which are workable. A formula which

⁵⁰ This depends of course, in good part on the bargaining position of the union and management. Harbison considers the 1950 GM-UAW agreement as a “. . . shrewd and realistic treaty which has been hammered out over a period of years by an unusually efficient, farsighted, and intelligent management and an unusually militant, aggressive, and imaginative union.” One important element in their relationship, he points out, is GM’s freedom to manage the enterprise. He notes that “GM wanted a five-year contract to *retain*, not to *regain*, its managerial functions. After talking with a great many employers during the past year, I am convinced that very few companies are in so favorable a position. Most of them feel that they must retake ground lost through years of weak defensive bargaining with unions.” (Harbison, *op. cit.*, pp. 407, 409. (Italics in the original).

⁵¹ Studying the short-run wage-productivity relationship between 1919 and 1948, Kerr found that man-hour output and average hourly earnings in manufacturing moved differently three out of four years during this period. See, Kerr, *op. cit.*, p. 309.

⁵² This consideration assumes particular importance when we recall the difficulties in measuring productivity, especially in the short-run, or the variety of circumstantial influences to which it is subject. Stigler, in fact, concludes that “short-run changes in output per man-hour cannot be interpreted as measures of economic progress.” (Stigler, *op. cit.*, p. 46).

aims to formalize the long-run tendency into an annual pattern must prove its worth before wide adoption is justified.

The vigorous discussion evoked by the "progress sharing" formula, as C. E. Wilson, then president of General Motors, termed it, broadened considerably the public's understanding of productivity. There may be, as a result, more general knowledge of the facts: the modest annual average rise, the substantial total to which it accumulates over the years, and the wide diffusion of the benefits. The importance of recognizing the factors which promote rising productivity may also receive more emphasis than heretofore.

The formula asks no more of its beneficiaries than a cooperative attitude toward the methods whereby higher productivity is achieved. This is realistic enough, so long as it does not promote belief that higher productivity proceeds effortlessly on its own momentum.

We must not minimize the importance of a wide understanding that rising national productivity is the important thing, first and last; and that it rises because people work more effectively—with better tools or materials or methods.

But individual or team motivation toward more effective work is provided by incentives that apply closely to the job at hand. To this phase of our inquiry we now turn.

IV. ELEMENTS OF TEAMWORK

It is a paradox that the most individualistic of peoples [Americans] are now the people among whom the art of combination has reached its maximum.

—James Bryce

TEAMWORK IS MORE THAN THE COORDINATED behavior of several people. If it were that only, we could apply the term to the process whereby a crowd files into a stadium and becomes seated—so long as the procedure be orderly. But at least two additional elements are necessary before coordinated action deserves to be termed teamwork.

One of these elements is a *shared purpose* toward which each member is counted upon to contribute. It may be a very definite purpose such as the winning of a game or the scaling of a mountain peak. It may be a purpose less sharp of contour, and hence less certain as to when it has been achieved, such as the establishment of a successful business, or the winning of leadership in a given field. But something in the nature of a goal, understood by all the team, there must be.

The other element is *organization*. It may be quite informal, even improvised, as in the case of a bucket-brigade hastily assembled to put out a fire in the neighborhood. In teamwork which is no more than the sharing of identical tasks, or the allotting of different tasks in a simple aggregate of work, organization may be so rudimentary as to be hardly perceptible. Yet it is there.

Essentials for Successful Teamwork

For teamwork to be truly effective, still other elements are essential. A prime element is the *willingness* of each member to perform the part expected of him. Requisite to this are, of course, *knowledge* of what is expected, and *ability* to perform it. And there must be adequate *guidance*—direction or management—together with the *systems* and the *signals* necessary to the accomplishing of team purposes.

All of these elements may be provided. But the greater task remains: *the building of team spirit*. What are the elements of that task?

Motivation in Teamwork

First, and perhaps foremost, is *motivation*. The members of a team must ardently want to play hard and well, *as a team*. They must want to win, or at any rate, not to lose unworthily—not to experience defeat through failure of teamwork.

To that end, there must be, on each one's part, a clear realization that the team's success is the individual's success. However humble his part may be, he is entitled to share in the triumph of his team, if he performed his part well.

This means that each member must know what the team's purposes are, must feel that he can contribute something toward their achievement, and must believe that team gains or team losses mean something to him.

On the playing-field, this task of motivation is all but self-accomplishing. In business and industrial units, achieving motivation is a more complex matter.

To those in command, goals are clear and goal-orientation is to be expected; a management team which is weak in team spirit must have been very poorly selected or badly led. To the rank-and-file employee, the goals of an organization have no such power to focus hopes and energies, even when the goals are clearly understood. The larger the organization, the less likely it is that team spirit will be organization-wide. To be sure, there can be very general loyalty among the employees of even a large company, and the motivating power of loyalty must not be under-estimated. But goal-centered motivation is something more than loyalty.

Integration of Organizational Goals

When the "bonds of organization" (to use Bakke's expressive phrase) are skillfully woven and maintained, the broad goals of an organization can be served by the more modest goals of the units which comprise the organization. This can readily be observed in a company having units which make different products: each unit has goals of its own, and to the members of that unit these goals are more vivid than those of the parent company. Similarly with departments and sub-departments: goal-focused motivation can foster teamwork at each level in the management structure, and reach the level where work is performed.

The leader of a crew of loggers may win the men's acceptance of a goal calling for the felling of the large trees on a mountain slope (1) without an accident, (2) with a minimum of damage to surrounding younger growth, (3) within a period of twelve working-days. This goal may call forth team-

work as thorough and hearty as that of the top-level managers of the company, whose goal is the maintenance and advancement of an enduring enterprise.

While the zeal for over-all purposes may diminish at successively lower levels in the company structure, if departmental goals are zealously pursued by department chiefs, the aggregate result will serve the over-all purposes.

Team Success and Individual Success

Placing prime emphasis upon the success of the team is wholly consistent with the individual's desire to excel in his own right. In a dramatic group, for example, it is to be expected that each member will want to play his own part superbly well. His incentive to do so is not weakened by his realization that the group's success is measured by the performance of the cast as a whole. If he can excel, and win preferment thereby, his fellows are not disadvantaged, provided he has not unfairly stolen a scene: teamwork may demand restraint as well as effort, not only on the stage but in the shop. The guidance of the leader must be followed in this respect, whether the leader be the coach of a team, the director of an orchestra, the commander of an army, or the supervisor of a work group.

One of the tests of a leader's competence is the way in which he utilizes the individual's drive to excel, to assert his own initiative, to stand out among his fellows. Team spirit can be enhanced by wise guidance of this impulse which is strong in some men and is present in some degree in many. If too aggressively asserted, it can be damaging to teamwork. The football player who must be a star at all costs can be a hazard to team spirit. In a management team as well, there can be personal competition so intense as to set men against one another instead of aiding one another. Holding the balance true between teamwork and individualism—encouraging the one without allowing the other to be retarded—is one of the arts of management.

Sound Organization as a Factor for Teamwork

Team members must not only be equal to their own tasks, but must be able to count upon one another with confidence. This means that each must know very clearly what is expected of him, and must feel that he can meet the expectation. It also means that each must proceed in the confident belief that the others are going to play their parts. This may call for a measure of familiarity with other functions—at any rate, with those which supplement, or may be supplemented by, one's own function.

There must be definition of job assignments. There must be channels for signals—instructions or commands. Save in the very simplest kinds of collaboration, there must be grouping of functions for efficiency and economy of effort, and methods of relating one group to another.

All of these are phases of organization—the purposive arranging of parts into an effective whole. Without this, teamwork is possible only in the most elementary sorts of activity. Two equal partners may work as a team with little or no organization. But in enterprises even slightly more complex, there is need for differentiation of function, and techniques of coordination. Without provision for these, teamwork is at best a random, almost accidental matter, even in smaller concerns. The larger the enterprise, the greater is the need for sound organization as a foundation for teamwork.

Men who are strongly motivated toward high endeavor can accomplish something, even in a poorly organized unit. But in such a situation, the obvious waste of effort is disheartening. Team spirit cannot long endure unless team performance is possible. Many a failure of teamwork can be explained by shortcomings of organization.

Administration and Teamwork

What an organization accomplishes is no more than the sum of what its members accomplish. Yet in good teamwork, the acts of one member are reinforced by the acts of others in such a way as to make it appear that endeavors are multiplied, rather than being merely added.

Essential to this result is administration—the planning, the directing and the coordinating of effort to achieve the team's objectives. Like good organization, proficient administration is essential to effective teamwork, and particularly to the accumulation of productive endeavor which yields high output per man-hour.

The bearing of administration upon esprit-de-corps at the work level is larger than many managers suspect. The well-known phrase, "To the employee, the foreman is management" is less than the whole truth. Employee opinion surveys⁵⁸ show that a good proportion of rank-and-file employees are able to distinguish, or at least try to form judgments upon, different levels of responsibility for administration. This fact is revealed in written comments which are so frequently volunteered in the paper-and-pencil type of survey, and in expressions during interviews. Comments such as these appear:

"More unity between the departments is greatly needed in our Company. Daily we see our foreman doing his best, which is plenty good I might add, but lack of cooperation from the superintendent is a terrific handicap."

"I believe that more definite lines of authority would improve the operation of the Company. Many times it appears that no one knows what his authority is. Our supervisor is a capable man, we all respect and like him, and it burns us up to see how long he has to wait for a

⁵⁸ Particular, though not sole, reference is to surveys conducted by the Division of Industrial Relations, Stanford University.

decision on a matter which ought to be left up to him in the first place.”

“In my department, the supervisor has virtually no contact with the manager in any way, and thus feels left out of it, i.e., not on the team. . . . To some extent this may have come about as a result of the ‘caste system’ now in effect. . . . It has been obvious that in some cases the assignments of rank were not based on the importance of the work or the education and experience of the individual, but on the amount of contact with the Head Office.”

“When you consider how often they change the signals on us, you wonder how we get out as much work as we do. I realize that this is a growing and changing industry, but that is no excuse for installing a new system on Monday and then changing right back to the former method on Tuesday or Wednesday. This has happened so often (and often requires that the work be done over when the change-back is ordered) that we have urged our section head to ignore the first order for a change because nine times out of ten it will be countermanded.”

A very large and probably increasing fraction of the rank-and-file workers in American industry have ability to see beyond their own work-group and to form opinions about the efficiency with which their organizations are operated. In some instances, their opinions may be wrong: the confusions and other faults which are complained of may not be preventable. But let no one suppose that these things go unnoticed by employees, or that the latter charge all of them to the immediate superior.

Nor is it to be assumed that such criticisms come only from grouchy, unproductive employees. Surveys have shown that those departments which top management rates highest in all-around performance are generally departments offering a higher-than-average proportion of critical comments. Other factors—age, for example—may have an influence: we find that these departments have a relatively larger number of employees aged 30 to 39, and it is in this age group that a critical attitude is most commonly shown.

In the home office of a large insurance company, the Survey Research Center of Michigan University found that employee criticism of certain company policies is more prevalent in high-producing sections than in low-producing sections. In a report on the survey in this company, the Center comments, “when criticism comes from the better motivated, higher producing employees, it cannot be dismissed as the general negativism of disaffected people.”⁵⁴

If teamwork and zeal for productivity are to prevail at the job level, there must be at least equal zeal and teamwork at the levels above. Example speaks more loudly than precept in this, as in most other phases of work relations.

⁵⁴ “Productivity, Supervision and Employee Morale.” Human Relations Series 1, Report 1, Survey Research Center, University of Michigan, 1948.

Participation

The democratic ideal does not require that all our affairs be conducted along the lines of a New England town meeting. But it surely implies that everyone ought to have the right to express himself upon issues affecting his destiny, and that decisions are, in general, best reached through persuasion rather than coercion. The word "participation" has come into common usage in this connection,—to mean not only taking part in activity but having a part in shaping the activity. Understanding the word thus, most would agree that participation is desirable in all joint endeavor, and especially so in work.

Participation can be attained in differing degrees depending upon circumstances and the nature of the effort involved. With a group of ten or twelve workers, a supervisor can achieve a relation resembling that in a football team: signals must be called by the quarterback, but the command-obedience element is scarcely thought of. Decisions upon matters within the scope of the group's authority can be taken after consulting each man; consensus will ordinarily influence the outcome. But if an emergency should arise—a fire in the building, for instance—the supervisor would bark out his orders in the fashion of an army sergeant, and instant obedience would be essential. The need for this is understood and seldom resented.

If the small group is a unit of a large enterprise, there will be many areas lying beyond the scope of group decision. Standards of quality for the goods or service produced, location of plants, and so on, will be decided by higher authority. In connection with the terms of employment, however, the members of the group may share in the decision-making—the workers through their union (if one exists in the plant), the supervisor through management channels—but their part in making decisions in these areas will be indirect, and will be small in comparison with the direct participation that is sometimes possible in the case of matters which are determined at the work level.

At successively higher levels in an organization, the same kind of natural, unstudied participation is attainable, whenever men can freely approach one another, deal sincerely with one another, and keep the essential goals always uppermost in mind. The giving of orders is a process of two-way communication in this relationship, free of any over-tone of command. In truth, orders hardly need to be passed from superior to subordinate; rather, both take their orders from the situation.⁵⁵ Here again we are referring to those phases of

⁵⁵ The phrase is that of Mary P. Follett; consult her essay "The Illusion of Final Authority" in the *Bulletin of the Taylor Society*, December 1926, a landmark in the literature of management. See also Chapter II "The Giving of Orders" in *Dynamic Administration, the Collected Papers of Mary Follett*, Harper Bros., 1941. See Paul Pigers, *Effective Communication in Industry*, National Association of Manufacturers, 1949, chapter 3, for an admirable analysis of order-giving as two-way communication.

work which are within the function of the group, or capable of being directly influenced by the group.

In the formulation of group objectives and standards, the case for participation is particularly strong. Recognized for many years as important at top levels of management, it wins increasing recognition at lower levels. Foremen no less than vice-presidents, hope to have some voice in developing goals for which they are to be held responsible—a hope which is being realized increasingly in many companies.

In the work group, too, participation in setting objectives and standards is an ideal to be striven for. It does not demand that expert judgment yield to consensus on such matters as output standards or rules of personal conduct. But it implies that those affected by standards or rules ought to be free to contribute their views upon them, to be given answers to their questions, and to be shown the grounds for decisions. The skillful supervisor learns by experience that this is the way to win acceptance of goals.

. . . a supervisor and his subordinates develop group aims and standards, even though they are never formally set and may appear only casually in conversation. The method of group discussion and decision strengthens this group teamwork and is probably the best way of changing its aims when they require changing. A man committed to do something in a meeting of a close-knit group like this will go through with his commitment, because he has had a part in the decision and has agreed to it after having had a chance to express his doubts as to whether the action is proper. He will feel supported by the fact that other members of the group are doing the same thing.⁵⁶

The desire to participate actively—to have a part in planning and in the making of decisions—may be less general than many writers assume. People differ in this, just as they differ in willingness to take responsibility. Trying to press everyone into participating is no more fruitful than any other kind of compulsion.

A very real problem in our democratic society is how to provide for and obtain willing participation from each person, according to his ability. Leaders there must be, and not all leaders can be elected by popular vote. Decisions have to be made, and not all decisions can wait upon consultation with those affected. Recognizing these necessities does no violence to the democratic way of life. We cannot ask that efficiency be sacrificed to an unworkable ideal.

Fortunately, the method of participation is generally more efficient in industry than the method of dominance, as well as more generally satisfying to leaders and to those led. The findings of research endorse the practice of wise and skillful managers in this regard.

⁵⁶ "How Democratic can industry be? Detroit Edison finds out", *Modern Industry*, September 15, 1950, p. 68.

People are more effectively motivated when they are given some degree of freedom in the way in which they do their work than when every action is prescribed in advance. They do better when some degree of decision-making about their jobs is possible than when all decisions are made for them. They respond more adequately when they are treated as personalities rather than as cogs in a machine. In short, if the ego motivations of self-determination, of self-expression, of a sense of personal worth can be tapped, the individual can be more effectively energized. The use of external sanctions, of pressuring for production may work to some degree, but not to the extent that the more internalized motives do. When the individual comes to identify himself with his job and with the work of his group, human resources are much more fully utilized in the production process.⁵⁷

These generalizations resulted from the survey mentioned earlier, a study conducted in a large insurance company, the purpose being to examine the psychological factors related to group productivity. Measures of productivity were quite definite: standardized work is done in a large number of sections of the company, and accurate records are kept of the personnel costs of accomplishing a given amount of identical output in each section. Accordingly, high producing sections can be analyzed separately from low producing ones.

The differences were found to be related primarily to supervision and management. In high production groups, first-line supervisors differed from those in low production groups in that they

- (1) are under less close supervision from their own supervisors
- (2) place less direct emphasis upon production as the goal
- (3) encourage employee participation in the making of decisions
- (4) are more "employee-centered"
- (5) spend more of their time in supervision and less in straight production work
- (6) have a greater feeling of confidence in their supervisory roles
- (7) feel that they know where they stand with the company.⁵⁸

The Michigan group does not, of course, maintain that these generalizations apply to every type of work situation. Studies in differing types of work situations might show that some of the generalizations apply only when work methods are well standardized. Researchers must be cautious in generalizing, and the Michigan scientists are to be respected for being modest in their claims.

⁵⁷ D. Katz, *Morale and Motivation in Industry*. Survey Research Center, University of Michigan. (Processed, 14 pages), p. 9.

⁵⁸ This listing of items appears in Dr. Katz's paper already cited, and in the report of the study (in which he participated) entitled *Productivity, Supervision and Employee Morale*, also previously cited.

But a second study (more are to follow) largely confirmed the findings of the first. It was conducted among maintenance-of-way workers on the Chesapeake and Ohio Railway. A vice-president of that road, in describing the study and its results, says

Business today should put as much emphasis on human research as on technological and product research. It must come to conclusions about people based on facts . . . Fortunately, the universities and the social scientists are doing great pioneering work. Business should join ranks with them and . . . give human problems the concentrated objective attention they give any other major business problem.⁵⁹

The challenge is timely. Our knowledge in this field is being augmented steadily, but it is meager. The need is great for deeper understanding of many phases of participation. We need answers to puzzling questions which arise from examination of experiences, favorable and unfavorable, in this area. Light has been thrown on some of the problems by experiments conducted in psychological laboratories and in specially created "social climates". The layman risks bewilderment as he reads reports of these, though scholars work persistently toward unification and clarification of findings.⁶⁰

The best laboratory for research is surely industry itself. Practitioner and scholar must join forces, as C. R. Hook urges, to find ways of providing maximum participation in the creative phases of work, without losing the advantages which flow from centralized direction of the production process.

Practice need not wait upon research. Wherever an innovation is tried, there is a possibility that knowledge may be enlarged. With characteristic vigor, American enterprise is trying out techniques of participation, and we cannot doubt that progress will be made toward the goal.

Early successes with a particular plan may tempt the enthusiast to proclaim that a total answer has been found. Examination of past experience leads to skepticism toward extravagant claims. A "plan" which works admirably in one set of circumstances may prove disappointing in another. Profit-sharing, share-of-production, multiple-management,—all have worked well in some cases and have been abandoned in others. On the other hand, there is no lack of examples of organizations in which harmonious, non-autocratic relations have continued over many years, through boom and depression, war and peace, with no particular "plan" at all.

⁵⁹ Chas. R. Hook, "Profits and People" in *The Human Relations Job of Personnel Management*. American Management Association, Personnel Series Number 132, New York, 1950, p. 6.

⁶⁰ See, for example, Douglas McGregor, "Toward a Theory of Organized Human Effort in Industry". *Psychology of Labor-Management Relations*. Proceedings of 1949 Conference, edited by Arthur Kornhauser. Industrial Relations Research Association, Publication No. 3. Champaign, Illinois.

Will analysis prove that there is a common element in all situations where teamwork has been maintained successfully over long periods?

An answer to that question is offered by an able executive whose thoughtful writings in this field command respect. He offers it as hypothesis only, asking that it be tested against experience.

The common denominator is the opportunity for the average worker to share in the task of thinking. . . . Management must believe in the right and the ability of workers to share in the task of thinking and planning. . . . We must enable them to know the facts needed for intelligent thinking. We must welcome the expression of their thinking and let management decisions be influenced by it.⁶¹

The hypothesis may seem unduly optimistic, but automation holds promise of rapid progress in reducing the routine, humdrum tasks which can be performed mechanically. Drudgery can be coded onto a punched tape; operations now controlled manually can be controlled electronically. Human operators will always be needed, to be sure; but their work will be very different from that of the traditional "machine-tender". The work will involve watching, gauging, adjusting; and in advance of each productive process, there will be preparatory task calling for imagination and resourcefulness. More than heretofore, there may be a sharing of the satisfactions yielded by creative phases of work. Cooperative thinking and planning—teamwork in a most fruitful and satisfying form—may become characteristic of industry in the years ahead.

⁶¹ Alexander R. Heron. *Why Men Work*. Stanford University Press, 1948, pp. 172 and 176. See also his *Sharing Information with Employees*. Stanford University Press, 1942.

V. UNDERSTANDING

To learn to be human is to develop through the give-and-take of communication an effective sense of being an individually distinctive member of a community; one who understands and appreciates its beliefs, desires and methods, and who contributes to a further conversion of organic powers into human resources and values.

—John Dewey

TO SAY OF ANYONE, "HE IS AN UNDERSTANDING PERSON", is to pay tribute to more than his mastery of facts. It is to pronounce him competent in one of the social skills which is of a high order. An understanding person grasps meanings that others want to convey, senses the feelings that color the meanings, and is able to keep his own feelings from blocking comprehension of the viewpoint of others. He is able to take part in the process which has been termed "cooperative thinking".

To say of two men, "They understand each other" is not necessarily to say that they get along well together: each may understand that the other despises him. But to refer to the relation between two men as an understanding one, is usually to pronounce it a constructive relationship, one not likely to be destroyed even though disagreement should arise over a fact or an issue.

But let us note that the phrase "understanding of" can convey a meaning different from the foregoing one. A man may have an understanding of a fact or a principle, or an entire branch of learning—even, let us say, psychology. But if in everyday life, he acts as though he lacks understanding of the sentiments and behavior of people, we would hardly term him "an understanding person". This is not to underestimate the importance of understanding impersonal facts and principles, as a basis for building understanding relationships. Let the point be illustrated by an imaginary incident in the employer-employee relationship.

Understanding in the Employment Relationship

To a newcomer in the work-force, the employer might say, "Joe, I hope you'll find this the best job and the best place to work you've ever known."

Joe may answer, "Thanks. I hope so too, and I want my work to be worth every dollar you pay me."

Each may be speaking sincerely. Yet each knows that he is momentarily placing himself in the other's shoes. It is Joe whose chief hope is to find the job a good one; it is the manager who is chiefly concerned that a full day's work will be forthcoming for every day's pay.

Each man understands the primary end sought by the other—the employee wants a good working-life; the employer wants good work from the employee. The two goals are quite compatible and both parties understand this too. In fact, Joe and his employer might contend that their goals are not only compatible but reciprocal, in a sense. For Joe wants to perform good work, just as he wants to hold a good job. And the employer wants to feel that his employees are satisfied with their jobs, just as he wants to get good work for the wages he pays.

Are such attitudes—and that kind of understanding—scarce among employers and employees today? Let us examine some evidence pointing to an optimistic answer, glancing first at surveys of employee opinion regarding the factors which bring satisfaction in work.

Employee Goals and Attitudes

A good many surveys have been conducted by psychologists and others, endeavoring to find the factors which figure most importantly in job satisfaction. The techniques used include oral interviews, pencil and paper questionnaires, scales, check-lists and other variations. Results vary somewhat, not only with the method employed but with the state of the job-market and several other factors. Generalization is difficult indeed, as one examines the findings of one survey after another. Some agreement can be found, especially on the negative side: the wage, for example, is found by almost all pollsters to occupy a rather low position in the scale of factors important to satisfaction in work.

One factor which (if included in a check-list along with other usual items) is very likely to be ranked highly by any representative group of workers is, "Knowing that I am doing useful work and doing it well". Indeed, in surveys conducted by the Stanford University Division of Industrial Relations⁶² covering nearly 7,000 employees, this factor led all others, not only in the entire group but also in nearly all large sub-groups. Using a simple method of weighting and then calculating the percentage of weights received by each factor, it was found that "Knowing I am doing useful work and doing it well"

⁶² The Stanford list of factors to be checked is not long; only nine items are given, the list having been reduced to that length as a result of experimentation. With a longer list, or with differently worded items, the findings might be different.

ranked higher with 16.4 percent of the total weighting. Next highest is security of employment (15.8 percent) and in third place is "having fair and understanding supervision" (15.1 percent).

It would be a mistake to place too great emphasis upon this finding. Admittedly, the check-list method has its limitations: interviewing may be a more fruitful method of probing people's values, though this method has drawbacks too. But there is some significance in the fact that a goodly number of employees, given opportunity to choose, (anonymously, in the surveys referred to) will place high importance on "Knowing that I do useful work and do it well."

If employers were polled in similar fashion, would the result supply the other half of the picture? Would many employers rank highly, as a factor in business satisfaction, "Knowing that I supply jobs which afford real satisfaction to the employees holding them?" If such a survey has been conducted, I do not know of it. One can only judge from what he hears and sees, and from his own experience as a job-receiver or a job-giver. So judging, let me record one man's guess that a very large proportion of present-day employers⁶³ would say—and sincerely—"To have employees who are glad they work for me is pretty nearly as important to me as any other factor in my business life."

To believe that many (if not most) employees earnestly want to work productively and well, and that employers equally desire to offer good jobs—is to believe that one of the important bases of understanding really exists in our economic society: a degree of mutuality in the goal-values of employers and employees.

Let us not load this belief with more than it can bear of optimism. Grant, for one thing, that by no means all employers exhibit deep concern about the job satisfaction of their people. Grant that by no means all employees rate the doing of good work as an important element in the satisfaction they derive from a job.

Grant also that understanding and valuing these related goals may still leave a wide zone of difference in definition. Joe Worker's idea of what constitutes a good job may well exceed the concept his employer has of it. And the employer's standard of work performance may go beyond what Joe deems reasonable. No one should expect such differences to be rare.

Yet there is evidence that agreement is not rare, either. Examining surveys of employee attitudes and general polls of working people, one gets the impression that it is rather the rule than the exception for employees to speak

⁶³ As used here, the term "employers" must include corporation executives—those who stand in the employer's shoes as the worker sees it. In fact, for this discussion almost anyone who manages the work of others is an "employer", if he has a measure of real control over conditions that influence satisfaction in work.

favorably of the jobs they hold. In the Stanford surveys, for example, a list of some forty questions is concluded by this one:

After answering these questions, and considering anything which was not included in them, how do you feel toward your job and your company on the whole? (Check the answer which most nearly expresses your feelings.)

The percentage figure in front of each answer shows the proportion of the employees who selected that answer to the question.

19%	Very well satisfied
32%	Well satisfied
31%	Satisfied
16%	Somewhat dissatisfied
2%	Very dissatisfied

It is not claimed that this group of people⁶⁴ is representative of the American labor force. For one thing, most of the surveys were conducted in Western companies. For another, the companies were not chosen at random, but because of willingness to collaborate—which is something of a selective factor. In all except one of the companies, the production employees are under union contract; the unions involved were consulted about the surveys, although not asked to give support of a positive kind. Their ready acceptance of the project may point to a status of labor-management relations that is above average. But on the whole, it seems likely that these employees are not differently situated or constituted from the majority of the people who are in private, non-agricultural employment in this country. That 82 percent express satisfaction with their jobs, considered “on the whole”, is a fact of no mean significance.

Executive Attitudes

In several of the companies where surveys were taken, men of top management were asked to predict what the results would be on several of the questions. It was interesting to note how generally the executives underestimated the percentage of favorable answers to those questions which, like the one quoted above, call for a rather broad view of the job—not for scrutiny of specific phases like wages and the opportunity to progress. As to the question quoted, only one executive in twelve predicted that the response would be as favorable as it proved to be.

⁶⁴ The number of answers to the question totals 14,400, but almost 2,000 of the people were polled twice, the survey having been repeated (after an interval of a year or two) in several instances. Eleven companies cooperated, in a total of seventeen locations, both plant and office. The question about factors in job satisfaction, discussed on a preceding page, was included in some of these polls; as was mentioned, that question has been answered by almost 7,000 persons.

Those executives who presumably should know the production workers best—factory superintendents, for example—predicted rather more pessimistically and hence less accurately than most men in the “front office”. In a subsequent discussion of the predictions and the survey findings in one company, a plant superintendent gave voice to views which can be summarized thus:

This thing is a mystery to me! The count on that “pay-off question” shows that 82 percent of the boys in the plant checked in as “satisfied” or better, in estimating how they feel about their jobs! I figured that about 50 percent would do so. I am glad I was proven wrong. But if you could hear the gripes which I hear daily, you would think I was romancing when I guessed that only half of our men are dissatisfied with their jobs!

Look at the way they answered some of the other questions—“How secure do you feel in your job?” “How does your pay compare with pay elsewhere, for similar work?” “How much favoritism exists in your section?” The answers were more favorable than I had expected, but still they weren’t 82 percent favorable, as in the case of that question about over-all satisfaction.

Tell me why men can say they are satisfied with their jobs, when they feel dissatisfied with so many angles of their jobs?

In one form or another, that question has arisen in the mind of many a manager. Why, he asks, do these employees stay with jobs which they roundly criticize, piece-meal or even in toto, from time to time? In times of job scarcity it might be understandable, but not when jobs may be had almost for the asking!

Suppose, however, the puzzled executive should be asked the counter-question dealing with *his* side of the relationship:

Considering your work-force as a whole, thinking of its weaknesses as well as its strengths, how do you feel about your employees’ performance of their work?

Given the same sliding scale of choice—“very well satisfied”, and so on—can it be doubted that a good majority of executives would record themselves as satisfied? In so recording himself, perhaps not one would be expressing entire satisfaction. Each might recall an hour in which he felt otherwise about some proportion of his work-force. But in a sober appraisal of over-all performance, he relegates such occasions to their proper place in the scale, and is likely to express some such judgment as, “A pretty good lot they are, by and large. Of course, there is always room for improvement, but I wouldn’t trade our work-force for any other”—words which I once heard an employer say as he stood at the entrance to his plant, watching his men return to work after a strike had been settled.

It would be surprising if executives did not, as a rule, appraise the performance of their people in the same way that employees tend to appraise

their jobs, balancing the good against the not-so-good, the days when things go well against the days when things go badly. Perfection not being expected in this imperfect world, the less-than-perfect is accepted by most people as being satisfactory, and well worth holding.

This may appear to be too rosy an estimate of the prevailing attitude of American workers and managers. But it receives support of observers from abroad whose viewpoint is more detached than our own. Of the Productivity Teams which have come to this country to study our industrial methods, many have commented on the cordiality of the relations between management and men, the "happy and democratic atmosphere prevailing" in the plants visited, and the satisfaction which that relation and that atmosphere yield.

Whether generally prevalent or not, a relationship based on goodwill, tolerance, acceptance of leadership and mutual respect is attainable in industry. It must surely be what most people earnestly want from their relationship with their associates on the same level in the organization. Even if it did not contribute to productive efficiency, it would be worth striving for. Our friends from abroad believe it to be one of the chief explanations of the high productivity—high relative to that of their countries—in the plants they visited.

Within work groups at the floor level, its attainment comes largely through the supervisor's skill and effort, although good supervision is not the sole determinant. Much of what was said in our discussion of teamwork is pertinent here. Wise placement, fair compensation—all the elements of sound employee relations policy are essential.

For the enterprise as an entirety, it may be another matter, and the larger the enterprise, the more it becomes another matter. Top management may ardently wish that a cordial, understanding relationship should prevail throughout—not with the intimacy and immediacy which seems natural at the work level, to be sure; but in such measure as to win hearty acceptance of, and perhaps even identification with the goals and policies of the enterprise.

But identification depends in large part upon experience—vividly personal experience of the kind that makes it natural to use the pronoun "we", rather than "they", in referring to associates. "Does the job I hold offer me a good measure of what I think I have a right to hope for, including the satisfaction of being part of a congenial group?"

"Similarly, though less immediately and vividly, with my relation to the company by which I am employed. From time to time my employer offers me literature having the obvious purpose of showing me how my interests are linked with those of the company. From other sources come emphasis on shortcomings of my job—from a skeptical fellow-employee, or a speech-maker in my union meeting. And the indefatigable leftists are never silent.

“Above all these voices, rises the voice of experience. If I have found that working in this enterprise has brought me a good measure of satisfaction, I will be disposed to realize the stake which I have in common with those who own and those who manage the business. I do not expect that each rise in the net profit of my company will bring a forward step in my own fortunes, just as I do not expect to step backward with every downturn. It is enough to know that my management believes that my fellows and I are a part of this enterprise and shows its belief in its dealings with us, not only in economic matters but in the day-to-day personal relations which count for so much.”

The Vitality of Attitudes of Management and Employees

In short, employee attitude tends to reflect management attitude as the employee perceives it in action—in the yield of satisfactions, tangible and intangible, from work. The satisfactions yielded may, to be sure, fall somewhere short of what is wished for. But just as the baseball fan does not ask his favorite team to play error-less ball, the average man does not expect his job to yield every satisfaction for which he yearns. He asks for “the greater, not the perfect, good.”

Shortcomings which he cannot account for rankle most keenly. For example, unpleasant surprises about even small matters—a change in time-clock location, a shift in the lunch hour—can cause vexation which may seem, to the manager, to be out of all proportion to their importance; belated explanations do not wholly remove the sting. Here is a real place for communication. Plain talk about matters that may affect the individual, even in slight degree, will do more to promote understanding than a dozen lessons about our free enterprise system could do.

All this is to say that actions must be consistent with words, if the words are to carry weight. Before employees believe that their interests are identified with the enterprise, management must firmly believe it, and must act consistently with that belief. Before assuming that plain human stubbornness is at the root of employee indifference or hostility, managers should look elsewhere for explanation.

Step one, to me, is top management self-analysis. If management attitudes determine employee attitudes, we must begin by determining our own. Are we [in business] simply to make money or do we acknowledge a stewardship toward employees, stockholders and consumers? . . . Have we a management policy—a code of our own? . . . Do we want our employees to get a sense of dignity, achievement, satisfaction and security through working harmoniously with others in a well-organized, rational, productive industrial structure and at fair wages?

Above all, are we willing to work to create those conditions?⁶⁵

Earlier in the address quoted, the speaker said, "You can buy a man's time. You can buy a man's physical presence in a given place (and) a measured number of skilled muscular motions per hour or day. But you cannot buy enthusiasm . . . you cannot buy initiative . . . loyalty. . . . You have to *earn* these things!"

Common Interests—and "Identification"

The research director of a large CIO union has expressed his skepticism on this score, and states that it is the trade unionist point of view.

Most fundamentally, unions have challenged management's concept that a worker can find a satisfactory way of life by accepting the employer's logics, identifying himself with the company, and in general permitting himself to be absorbed into the business ethic. *The profitability and efficiency of the enterprise cannot be the workers' primary concern:* what is "good for the boss" is not necessarily the best for them. By overlooking this fundamental point, management is making a wasteful and perhaps dangerous mistake. A personnel policy built on the same error cannot long endure in an economy in which trade unionism is constantly growing in scope, strength, and maturity.

Unions are also challenging the belief that personal identification with a particular plant or company is essential in building cooperation and a "will to work". Some management spokesmen, perhaps with excellent intentions, have argued that loyalty to the company and to the union can be maintained concurrently, without contradiction. Unfortunately, this well-meant concept does not stand up under even a cursory examination. The worker's attitude toward the enterprise is conditioned by a vast complex of personal and social factors, as well as by prevailing attitudes among workers as a whole—quite independent of the needs, opinions, objectives, or activities of the specific management. *The union cannot and will not become the handmaiden of employer policy.*

In sum, the growth of unions has wholly invalidated the *assumption that an enterprise can be operated solely on the basis of management's logics and management's ideal of appropriate worker behavior.*⁶⁶

Italicized emphasis, not in the original, is added in three places in the quotation. With the ideas expressed in those phrases, few people would quarrel. "The workers' primary concern" is not "the profitability and effi-

⁶⁵ Clarence Francis, *The Causes of Industrial Peace*. Talk delivered before the 52nd Annual Congress of American Industry, December 1947. National Association of Manufacturers, New York.

⁶⁶ Solomon Barkin, "A trade unionist appraises management personnel philosophy". *Harvard Business Review*, September 1950, pp. 63-64.

ciency of the enterprise". It may be doubted that any one, from chief executive to sweeper, can be expected to have the enterprise's success as his *primary* concern. The health, happiness and general welfare of family and self come first to most people who work, whatever their level.

But another trade unionist, explaining why his union stands ready to render management engineering services to employers who request them—and without cost to the employer—makes this observation:

That program is based upon the basic assumption that if an employer makes money, his workers will be in a better position to make money. It is as hard-headed as that.⁶⁷

As to a union's becoming "the handmaiden of employer policy", let us grant the absurdity of this, and the equal absurdity of the employer being expected to act as the union's handmaiden. Grant, too, that "management's ideal of appropriate worker behavior" can be accepted by workers only to the extent that the ideal is realistic. With equal directness it could be said that workers cannot—and do not—expect to impose their ideal of appropriate behavior unilaterally.

Can Loyalties Be Concurrent?

As to the quoted author's contention that loyalty to the company cannot be maintained concurrently with loyalty to the union,⁶⁸ it is not easy to reconcile with an opposed view which the same author helped to draft, and joined with many other leaders of labor, business and agriculture in signing. It was published by the National Planning Association in 1946—"Goals of Cooperation—A Declaration of Interdependence". The Statement makes it clear that each signer speaks only for himself, not for his organization. Excerpts from this Statement follow, with emphasis supplied:

WE OF BUSINESS recognize that the major objective of management is to operate in the public interest. This involves a number of things, among which are increased productivity and consumption, and the greatest possible achievement of employee satisfaction.

. . . We consider it our responsibility to cooperate with a union if and when designated by the workers to represent them and to take no action to detract from its integrity. We accept fully genuine collective bargaining as a workable, practical, and democratic way to adjust controversies. . . .

⁶⁷ William Gomberg in *The House of Labor*, earlier cited, p. 268.

⁶⁸ Note that Barkin adds the phrase "without contradiction" at this point. It is not clear whether he means that the management spokesmen have contended, "without contradiction," that loyalties can be maintained concurrently, — or that contradictions (meaning differences over given issues?) are bound to arise, even in the most cooperative situation. If the latter is implied, it will be readily granted.

The best way to get employees really to adopt company success as a working goal is to give them understanding of their stake in the success of the company and their responsibilities for the attainment of that goal.

WE OF LABOR believe that the basis of America's economy should be private enterprise, with private business and industry and agriculture operating as the primary means for providing jobs and producing goods and services. We recognize that profits are a condition of business survival and a test of efficiency. We recognize that management has the job of managing the enterprise. . . .

We think of the union as a real part of the enterprise, and we say that unions should have an interest in the survival of efficient management. . . . The union leader should promote the welfare of the business as well as that of the employees. He should come to the bargaining table with knowledge and understanding of the problems facing management as well as those facing the employees, and be prepared to encourage employer and employee practices which will increase productivity and improve the competitive position of the company. . . .

We of labor have a major job in informing union members of the responsibilities which the employer is facing, the work and competitive position of the company, and the importance of the union to company welfare. *We do not wish union members to feel that loyalty to the union excludes loyalty to the company. We believe that loyalty comes about through active participation, and if unions increase worker-participation in the company's success, their loyalty to and confidence in both the company and the union will be increased.*

Neither a company nor a union can expect people to show it greater loyalty than it deserves. Indeed, if the word "loyalty" implies devotion of an emotional sort, it might be better to use another word. "Fidelity" hits closer to the mark. Fidelity to duty as a union member; fidelity to duty as a worker in an enterprise—these can be won and held concurrently. A good case could be made for the proposition that the two are correlated, when collective bargaining is successfully conducted. The man who is faithful to his obligations to his union is likely to be faithful to his obligations to his employer.⁶⁹

To win increasing participation by employees in their company's success—the goal so admirably stated by the Labor members of the National Planning Association Committee—management must supply understanding of how success is achieved.

⁶⁹ See "An experiment in Industrial Harmony" by B. Gottlieb and W. A. Kerr, *Personnel Psychology*, Winter 1950. A survey among the employees of a good-sized company showed that those workers who expressed the most favorable attitudes toward the company also tended to be most favorable toward the union. The same relation existed in attitudes toward the foreman and the union steward.

Some Fundamentals of Successful Management

Thorough and vivid understanding is best won by experience, and only those who have been charged with managerial duties can fully comprehend what successful management must involve. But certain fundamentals of management are understood in good measure by a very large proportion of those who work at desk or bench, whether or not they have had experience or education in management. Several of these are worth brief consideration.⁷⁰

THE IMPORTANCE OF CUSTOMER GOODWILL

Realization that the customer is the real paymaster is most evident among those whose work brings some contact with customers; for example, the traffic people and flight crews of an airline stress customer relations more emphatically than the maintenance men. But employees who rarely or never see a customer can also be brought to understand that customers must be well served—supplied with products or services of satisfactory quality, with the expected promptness and regularity. “If the superintendent had told us that those sheets were a rush job for our biggest customer,” said the president of the local union in a steel mill, “we would all have agreed to work on Thanksgiving Day, instead of all refusing. We don’t want our Company to lose any goodwill. We assumed that that steel was going into the warehouse, and figured that next week was as good as Friday, to put it in there.”

THE NECESSITY FOR EFFICIENT OPERATION AND FOR COMPETENCE IN WORK

Employee attitudes are found to be favorable to efficiency of over-all operation, and critical of apparent inefficiency, even in periods when demand is so brisk that management emphasizes output rather than cost control. Dissatisfaction with equipment or method rests more upon belief that the shortcomings reduce effectiveness of work, than upon complaint about the burdens they place on the employee.

CONSTANT IMPROVEMENT

Self-interest may color the individual’s attitude toward a given change: an improvement which threatens one’s own security is likely to appear as no real progress. But there is general realization among employees that no enterprise can be expected to endure if it fails to keep abreast of the times, and that it is folly to expect to benefit from progress while opposing progress. Not

⁷⁰ The analysis which follows is based largely upon surveys previously referred to; other survey results have also been drawn upon. No claim of statistical precision is made; rather, the statements summarize the impression gained from examining results of questionnaire surveys and interviews, as well as personal experience in industry, both as a union official and as an employee.

a few employees, asked to state reasons for liking their present jobs, mention the sense of security they enjoy by reason of the progressiveness of their employer: "This company is in business to stay; it is on its toes." Even more emphatic are those to whom an opportunity to advance is a primary factor.⁷¹ As to each of the foregoing areas, employee understanding may be only vague and general unless management supplies the information from which a specific and vivid understanding can be shaped.

"Significantly, many managers have discovered that what employees want is exactly what management most wants them to have—information about the company, its production, its operations, its people, its economics."⁷²

THE PART PLAYED BY LEADERSHIP

Another fundamental of management recognized by employees is *the part played by leadership in work*. Here we go even further into the realm of unprovables: we are dealing with little more than impressions, admittedly. But most people who work in office or plant, on line or staff positions or in the ranks, welcome good leadership and know that it is as important in the work relationship as in other phases of life. Further, most people want to like their leaders and to respect them. The command-obedience relationship which is inescapable in industry holds an element of strain, the human will being the wayward thing that it is; but this element very largely recedes, given wise leadership.

Employees' ideas about leadership in work are expressed in a variety of ways, but underlying a great many of the expressions is the idea that *leadership supplies the spark which makes the work relationship a meaningful process of joint accomplishment*. Usually the reference is to the foreman, or to his counterpart in the office, the sales organization, or whatever the working group may be:

Question: How well do you like your foreman?

Answer (a trackman on a railroad is speaking): Fine. He's good to work for. He's an all-around good fellow. He knows railroading—I'll say that. . . . He does exactly what he says he'll do. He drives [the men]

⁷¹ A survey of employee opinion in 1949 in a company operating a chain of food stores supplied an interesting example of conflicting attitudes toward change. The stores did not yet carry packaged meats in the open freezer units; competing stores were doing so and public acceptance had been demonstrated. Many food clerks expressed concern about this, the first instance to their knowledge when management had let competitors get ahead of them. The meat cutters, on the contrary, felt that the management was showing its wisdom by offering meats at the butcher counters only!

⁷² *Case Book of Employee Communications in Action*, a cross-section of manufacturing industry's experience in developing successful in-plant information programs. New York, National Association of Manufacturers, October 1950, p. iii.

sometimes, but only if it is absolutely necessary. He takes an interest in them. Looks out for their safety. . . . He lays out the work in the morning and we all pitch in. He doesn't seem to direct the work at all. He knows he can count on us to do it the way he wants it done.⁷³

A mechanic in the maintenance shop of a large air-line, who serves as General Chairman of the Union (U.T.W.A.) in the shop:

The way my boss gives orders, it's a pleasure to carry them out. When he tells you what to do, he says it as though he feels good about having a man he can count on to do it right. He may say, "And if you need any help from me, just whistle." But you know he means, "Mac, you can do this job better than I could do it." A few of the fellows gripe sometimes because they think he works us too hard, but they can go to blazes as far as I'm concerned. I'll take up any real grievance that's brought to me, but hard work is no grievance—not as long as I'm Chairman here.

A worker in an auto factory (quoted in *The Worker Speaks*, General Motors Corporation, Detroit, 1949, p. 101):

. . . I have a good foreman, and for every reason I think he is good, I like my job that much better. He thinks I have more ability than I think I have, so I consistently do better work than I thought I could do.

Eagerness to follow competent leadership in work may not be a trait possessed by all men and women. But it is likely to be possessed by enough people in any work-force to justify proceeding as though all hold it. More than any other of the areas of understanding which we have mentioned, it holds promise of promoting team spirit and enhancing the satisfaction which teamwork gives.

Leadership may be too large a word for use in this connection. What has been referred to—and what is needed for team leadership—is ability to evoke willing effort toward desired goals. At successively higher levels in an organization, this ability is needed by the team leader in higher degree, and must be augmented by other executive traits. At the post of highest command, there is greatest need for this ability. The supporting traits are called for in exacting measure, if the organization is a large one; for the top leader not only needs to win teamwork among his immediate staff, but also he sets the level of leadership which will permeate the entire organization.

General Omar N. Bradley tells of a division engaged in the campaign in Normandy which performed so poorly that the First Army command thought, at one point, of breaking it up for replacements. Instead, he appointed a new commander, "and in the end the 90th became one of the best in the European theater. In the metamorphosis it demonstrated how swiftly a strong commander can infuse his own strength into a command. But even more than

⁷³ From a mimeographed paper of the Survey Research Center, University of Michigan.

that it proved what we had long contended, that man-for-man one division is just as good as another—they vary only in the skill and leadership of their commanders.”⁷⁴

In a business enterprise, as in an army division, the far reach of true leadership can be observed when the chief executive position is filled by a man who is everything that he desires his subordinates to become. One such man comes to mind: within a year of assuming the presidency of his company, his influence had been felt through the management structure to the foreman level and no doubt to the worker’s level as well. He had made very few changes in managerial personnel, and no striking changes in administrative methods; these had been adequate before. What he did was to spread a contagion, as one supervisor expressed it—the contagion of his leadership. He had found competence and cooperation in his organization; he built dynamic teamwork into it.

A parallel on the organized labor side comes to mind. In 1937, the employees of a large public utility company in the West switched allegiance from an “inside” union to the International Brotherhood of Electrical Workers. The city in which the company has its headquarters and its main operations was not then, nor is not now, a stronghold of organized labor; the completeness and speed of the shift in allegiance (office and professional employees had gone along with the blue-collar men) was something of a mystery, although all recognized that a very able leader had been in charge of the organizing work for the I.B.E.W.

An agreement was negotiated. It has been annually renegotiated without strife, and apparently with little or no bickering. Union and management have been realistic in their dealings. Arbitration is provided for, but has never been resorted to. There is mutual confidence and respect. Both the management and union officials take satisfaction in stating that the employees are frankly loyal to the company, frankly loyal to the union, and see no conflict between the two loyalties.

When asked to name the factors which may account for this unusually constructive collective bargaining situation, the business manager of the union mentioned first the name of the union representative who had, 13 years before, won the employees for the I.B.E.W. This man (let us call him Scott) had then been a Western representative for the international union. His office was in a distant state, but for some months he devoted almost full time to the job of getting his union established in this city, stayed on through the N.L.R.B. election and the subsequent negotiations with the company, and developed local leadership to take over the reins. Thereafter, he returned at infrequent intervals, and after his election to a high office in the International

⁷⁴ General Omar N. Bradley, “Beachhead to Breakout”, article in *Life Magazine*, April 16, 1951, p. 94.

at the war's end, he found it impossible—as indeed it was unessential—for him to continue visiting the locality.

“The inspiration of Scott's leadership started us off in such a way that we were just *bound* to do things right,” said the business manager of the local union. “Of course, we local men have made mistakes; we don't have the kind of judgment that Scott has, you know. But I believe that every mistake we've made has been an honest mistake. Scott said to me one time, ‘No one will expect you to have the wisdom of Abraham Lincoln, but they'll expect you to have the same kind of integrity he had. Now, don't you ever let 'em down.’

“And you know, he seems to have had just about the same influence with the company officials as with us. They don't give anything away, but they have never tried to take advantage of us. In fact, more than once they have called my attention to a point I was overlooking and said, ‘Why don't you phone Scott and get his thought on that?’ In each case, they saved me from a possible mistake—one that might have worked to their immediate advantage. They aren't interested in immediate advantages, and neither are we. We want whatever is sound and solid for the long pull, and there I'm quoting Scott again.”

The Company's vice-president for industrial relations, knowing nothing of the above conversation, expressed himself in very similar vein, in answer to the same question.

“Scott got us both off to a right start, piloted things along for a bit and then left the local leaders in complete charge. We just couldn't imagine that, after he left the ship, she'd move along as she has. The local includes everybody, you know—bookkeepers, receptionists, welders, linemen, coal handlers. ‘How on earth can they pull together, except under Scott's leadership?’ we asked ourselves. Well, it's worked out all right. They're tough sometimes, and I guess they think we're tough too. But we get along.”

Of course, leadership is only one factor in any industrial situation, and it is idle to expect even superb leadership to create utopia. The economic conditions surrounding an enterprise may be so unfavorable as to largely negate the influence of good leadership. Examples of this are not hard to find: companies having admirable relations with employees in periods of stability have seen deterioration set in, in times of inflation or of depression. On the other hand, an unpromising outlook for a business enterprise can stimulate increased zeal for collaboration: a number of union-management cooperation plans owe their origin to such a stimulus.

Able leaders utilize whatever elements are favorable in a given situation, wasting no energy in lamenting the fact that not all elements can be propitious. This test of leadership is very exacting when the leader on one side of the

collective bargaining table faces irresponsible leadership on the other side. It would be reasonable to assert that unreliable leadership on the one side must be altered or replaced, if faced by worthy leadership on the other side. Probably this happens more often than not, but the imponderables are many; we need more study of the interaction of leadership in collective bargaining. Assuredly, it would be well for employers and unions to act on the assumption that good leadership on the one side will eventually be met by good leadership on the other, if forbearance and firmness are maintained.

VI. Productivity and Union-Management Relations

Collective bargaining may be so operated as either to encourage or to impede the expansion of industry.

—Sumner H. Slichter

PRODUCTIVITY IN A GIVEN ENTERPRISE can be influenced, favorably or unfavorably, by the way in which labor agreements are drafted and administered. The influence may occasionally be direct and measurable. For example, a make-work rule in an agreement may raise man-hours per unit of output by a certain amount.

More commonly by far, the influence is indirect. Constructive collective bargaining tends to contribute toward good morale and teamwork, whereas discordant relations between union and management tend to have the opposite effect. Such indirect influence on productivity defies measurement because, if for no other reason, it cannot be isolated from other influences working in the same direction.

To be sure, a strike may be the immediate cause of a very definite decrease in *production*; but productivity may return to the pre-strike level shortly after production is resumed at the strike's end. Barring any real deterioration of relations between the parties as a result of the strike, this can usually be counted upon.

Union-Management Cooperation

Generally, management assumes full responsibility for the efficient conduct of the enterprise. But what of a program for union-management teamwork for productive efficiency? Can a case be made for a systematic joinder of effort to raise man-hour output, a definite sharing of function and responsibility toward that end?

Answers to that question are offered in wide variety. At one extreme are the thorough skeptics. At the other extreme are the ardent enthusiasts. Between these, there are several shades of opinion, including the "room for

hope" attitude, tempered by mild pessimism or by mild optimism, according to the individual's view as to what experience has shown.

As to where the responsibility for raising productivity ought to be placed, executive opinion was polled several years ago, with results that may appear surprising at first. "Is it chiefly in the business man's or in the labor leader's area of responsibility to raise productivity as much as possible?" ran the question. Eighty percent of the executives responded, "Both have responsibility." Thirteen percent held that it is chiefly the labor leader's responsibility. Barely seven percent held that it is chiefly that of the business man.⁷⁵

It can be safely assumed that no responding executive meant his answer to imply that a union can initiate technological changes, invest capital or conduct industrial research. These and most other activities which raise productivity directly or indirectly are functions of business enterprise. Beyond doubt, executives responded as though the question had been worded somewhat thus: "Who can be of most influence in winning employees' acceptance of higher productivity as a desirable goal, and in evoking wholehearted effort toward that goal?"

In brief answers to a question about so large an issue, many shadings of opinion are concealed. Among the executives who assign chief responsibility to labor leaders, there may be those who think in terms of eliminating practices that restrict output, while others think of some outstanding instance of union promotion of efficiency. Among the four-fifths who reply, "Both have responsibility," some may believe only that unions should refrain from opposing innovations, while others think in terms of positive collaboration between union officials and the men of management toward enhanced output.

Among union leaders, too, diversity of view is wide. Even those who frankly endorse the principle of teamwork for productivity are not of one mind as to either the degree or the method of effectuating the principle. Other spokesmen for organized labor, while aware of the need for efficient operation in industry, maintain that a union should not concern itself with production, believing that management exists for that purpose and seems quite able to achieve it without positive aid from unions; let the union stick to its own knitting.

Still others (though apparently not many) condemn the whole idea of union-management teamwork in this area. It is "plain adoption of speed-up as a major goal of unionism," said the officers of one union in their Report to the union's convention in April 1949. They quoted passages from the Statement of the Labor Committee of the National Planning Association urging union-management cooperation in removal of restrictive practices. The statement was roundly condemned:

⁷⁵ *Fortune Magazine*, March 1946, pp. 197-198.

Almost every agreement of our union would have to be dumped overboard to fit the Philosophy of the Statement. In fact, the whole reason for being a union would be taken away.⁷⁶

Opposition to collaboration for efficiency is also found among employers. One such states his position in a bulletin of the Bureau of National Affairs Inc. (June 1951) entitled "Plant Labor-Management Committees." Among other reasons why his company (not identified) opposes such committees is the hazard of

. . . introducing an approach which is contradictory to the management's thesis that rank-and-file employees are to do, not to meet and think.

Such doctrinaire opposition to joint effort for increased efficiency is rarely expressed. Being practical men, employers and union leaders generally base their views about a plan or program on practical grounds—questioning what the probable gains will be, as against the possible disadvantages; and asking especially what experience may have shown.

Just prior to World War II, Sumner Slichter examined union-management cooperation in several industries, covering both existing and defunct plans. He offered reasons why the policy of union-management cooperation has been uncommon; of these reasons, at least four have almost equal point today.

1. Most union leaders and members believe that employers are quite able to improve methods and reduce labor costs without help from the union.
2. Most employers have not sought the aid of unions in increasing efficiency.
3. A rising price-level has dulled interest of unions in the cost differential between union and non-union plants.
4. Many unions have seen no close relationship between unit costs and employment; they have assumed that the employer's costs can rise considerably without adverse effect on employment opportunities for the members.⁷⁷

Despite these factors working against the policy of union-management cooperation, Slichter expressed belief that the case for the policy is too strong to be defeated. "One may predict with considerable confidence," he said, "that the policy will be pursued more extensively in the future than in the past."

⁷⁶ Proceedings of the eighth biennial convention, International Longshoremen's and Warehousemen's Union, 1949, p. 57.

⁷⁷ Sumner Slichter, *Union Policies and Industrial Management*. Washington, The Brookings Institution, 1941. Chapter 19.

Experience with Joint Production Committees

In the year after Slichter's study appeared (1941), the War Production Board launched an intensive drive to establish Labor-Management Production Committees in plants supplying materiel for the military services. Both labor federations endorsed the concept of labor-management committees and, during the war, the United States Chamber of Commerce and the National Association of Manufacturers accepted them.

In the course of the drive, some 20,000 establishments were contacted by field workers of the WPB or by mail. Almost 5,000 committees had been registered by September 1944, covering about 7 million employees.

The figures are impressive, but the performance as a whole did not measure up to them. Sober analysis of the record shows that many of the committees were little more than paper organizations. Probably another 2,000 did no more than conduct rallies, distribute literature and display posters. Another thousand or so centered their efforts on reduction of absenteeism, promotion of safety, and other activities useful enough in themselves but indirectly related to output. Perhaps 500 committees gave real attention to matters directly affecting production: improved methods, care of equipment, waste reduction, and production schedules.

Postwar mortality was severe among joint production committees. By 1947, only 223 were still functioning in unionized plants, and 64 in non-union plants, according to a survey by the Bureau of Labor Statistics. Reasons given for discontinuance of the others included "Lack of interest" and "Ineffective"; most frequent of all was the cryptic and significant comment, "Discontinued because of the end of the war".⁷⁸

The meager harvest yielded by the wartime drive for Joint Production Committees is no real measure of the soundness of the idea. Nor is it a measure of the accuracy of Slichter's prophecy, earlier quoted.

Looking back on the war period, we conclude that no small part of the zeal for Joint Production Committees was forced-draft zeal, not reflecting a very solid belief in their effectiveness nor a genuine desire to put them to the test. Persuasion from Washington was sufficient to bring a token compliance but little more, on the part of local management and union leadership.

"Formal Plans" for Cooperation

Aside from war-time experience, what results have been achieved by union-management plans for enhanced efficiency?

⁷⁸ D. de Schweinitz, *Labor and Management in a Common Enterprise*, Harvard Press, Cambridge, 1949, gives an interesting analysis of the experience of the Joint Production Committee program during and after the war.

Experience with formal plans—that is, plans which set up some sort of committee system and provide for regular meetings—shows results varying all the way from spectacular success to utter failure. An enthusiastic journalist may describe a particular plan in such glowing terms as to make it appear that its installation will produce sure-fire results. But careful analysts have examined the record, and report that sure guide-posts for action are difficult to find.

One of the ablest of these analysts summarized the matter thus:

. . . it appears that formal cooperative plans can be both a means of reducing the area of hostility between management and labor and a means of converting a general attitude of hostility into one of “peaceful disagreement”. In many cases, also, they have resulted directly in increased productivity.

The record also shows, however, that cooperative plans have not, by any means, worked in all cases; and many companies believe that alternative measures have proved more effective. From the limited experience available, it cannot be said that formal cooperation will necessarily provide a solution to any particular company’s labor relations and productivity problems; but it can be stated that it is, at least, one possible answer, and there has been enough success with it to make consideration of the idea worthwhile.⁷⁹

This judgment was reached after surveying plans operating in 201 manufacturing companies, discovered in polling almost a thousand companies. The list of firms polled was drawn largely from the files of the War Production Drive because they were believed likely to have had experience with a plan of some type. The term “cooperation for productivity” was broadly defined for the survey’s purpose; plans focussing upon job evaluation, safety promotion, improved training and other activities were included, as well as those centering directly upon increased productivity. Plans involving no participation by a union were included, although almost nine-tenths were union-management plans. Somewhat more than half were departmental, not plant-wide, in scope.

Thus defined broadly *as to purpose*, labor-management cooperation for productivity was found in about twenty percent of the firms polled. It is safe to guess that this is a much higher percentage than would be reported if the poll had been representative of manufacturing enterprises generally.

Using a narrower definition, Charles A. Myers in his recent book *Industrial Relations in Sweden*, remarks that “. . . the only form of union-management cooperation plan still surviving in America is a modification of the original steelworkers’ plans, now found in about 30 firms.” He apparently

⁷⁹ Ernest Dale, *Greater Productivity through Labor-Management Cooperation*. New York, American Management Association, 1949, p. 163.

limits the term to plans such as Joseph Scanlon's which have definite provision for the division of gains from higher productivity, joint committees for encouraging and processing suggestions for method improvement, and other such elements. Such plans are indeed uncommon, although the estimate of Myers seems too small. These plans can often be traced to economic difficulties of the enterprise, the union having sought to come to the rescue in order to preserve the jobs of its people. If the storm is weathered, the plan may continue or it may come to an end, according to the viewpoint of the parties as to which course will best serve their interests. If the venture proves unsuccessful, it is likely to go unrecorded.

Informal Cooperation for Productivity

It appears difficult to reconcile, at first glance, the view of American students with that of observers from abroad. The former agree that cooperation for productivity is rare in this country. The latter (referring once more to the Productivity Teams from the nations of Western Europe) comment upon the prevalence of such cooperation—evidenced, as one group puts it, “by the positive approach of the trade unions to increasing output and efficiency.”

The clue to the apparent disparity of view was well put by a team composed wholly of British union officials in 1949 who spent six weeks in this country “to see particularly how the American trade unions are co-operating in dealing with productivity problems.” Their spectacles were less inclined to be rose-colored than those of the Industry Teams. (The latter, it should be noted, include both employers and unionists.) They found American union officials to be “less concerned about the need to increase productivity than trade unionists in Britain because in the main they can rely on management to be sufficiently progressive. . . . We found very little evidence of formal joint consultative machinery in American industry. . . . *Informal consultation appears to work satisfactorily. . . .*”⁸⁰

If we broaden the definition of labor-management cooperation for productivity to include relationships which are not formalized into a “plan,” we can say that such cooperation is by no means rare. Suppose we take Ben Selekman's characterization of “the structure of cooperation” between unions and managements as our concept—the situation wherein:

. . . the parties extend mutual concerns beyond the familiar matters of wages, hours, and conditions. They also recognize productive efficiency, the solvency of business, the price of products, the elimination of waste, the advance of technology, and so on, as components in their common

⁸⁰ *Trade Unions and Productivity*. Trades Union Congress, Smith Square, London, p. 11; emphasis is supplied.

interest. The union accepts managerial problems as being of concern to labor; management recognizes its stake in stable, effective unionism; together they dispose of problems as they arise.⁸¹

With this concept as a criterion, we can understand why the Industry Teams from Britain find union-management cooperation for productivity to be fairly common in this country.

To seek a statistical expression of its prevalence would be impractical, the concept lacking clear margins as it does, but it might be possible to ascertain how generally a pledge of cooperation for plant efficiency is included in collective bargaining agreements. The Bureau of Labor Statistics in a survey⁸² of the agreements in its files in 1948 quoted almost 100 clauses pledging cooperation of one sort or another. Forty of these provide for joint committees. But except for stating that "agreements rarely contain detailed plans for effectuating such cooperation", the bulletin does not indicate whether clauses pledging cooperation are commonly or rarely found in the contracts on file with the Bureau.

Of course a contract clause committing the parties to cooperation for efficiency will mean as much or as little as the parties want it to mean. Having such a clause in a contract is no guarantee of cooperative conduct, nor is its absence an indication that cooperative conduct does not prevail. Therefore, after discovering how many contracts contain a promise of cooperation, interesting though that datum would be, we would still lack an answer to the more important question—how generally is cooperation the actual practice in union-management relations today?

No clear-cut answer is offered to that question. An employer may have no clear-cut answer even with regard to his own enterprise: ask him whether efficiency in his business is helped or hindered by the union he deals with, and he is apt to say, "Helpful in some ways; not so, in others." Similarly with union officials who discuss this question candidly. "Of course we can't go all-out for efficiency," they say, in substance. "We know how important it is. So do our people. But there are times when we have to say 'Hold on, now! This change is going to hurt some workers, and we want to straighten that out first.' By and large, though, we go along with progress in our companies. We wouldn't want to block it, even if we could."

Informal, day-to-day cooperation may work out so satisfactorily that the parties can see no good reason for formalizing it. Perhaps this was the case with a good many companies and local unions which refrained from setting up Joint Production Committees during the War in spite of urging from Washington. Believing that their established relationship was producing

⁸¹ "Varieties of Labor Relations" in *Harvard Business Review*, March 1949.

⁸² *Collective Bargaining Provisions: Union-management cooperation, plant efficiency, and technological change*. 1949. (Bulletin No. 908-10).

fairly satisfactory results, they saw little gain, and a possible risk, in attempting to make it more systematic.

For risk there is. It may be no more than the risk that lurks in any formalizing process: the possibility of losing some of the spontaneity inherent in the cooperation—unplanned and unrehearsed—which arises when men face a common problem and feel that they can best solve it jointly. Neither precedent nor protocol counts for much, in such a situation. The job to be done is the focus of attention.

Holding to an informal level of cooperation will, as most managers and union officials see it, permit freedom to each group to pursue its main function. Management must be chiefly concerned with getting things done. The union's chief concern must be to protect and advance the interests of the members.

Each of the two will, in a healthy relationship, want the other to perform its function effectively, since both functions are important to each party. Good management will strive to protect and advance the employee's interest, for very practical reasons, and will not admit that this duty is a monopoly of the union; but probably few managers would contend that they can be as single-minded as the union on that score. And union leaders, however sincerely they prefer successful enterprises to unsuccessful ones, must admit that their interest in the position and prestige of their union is greater than their concern for any firm's success.

Thus there generally prevails on both sides the belief that each must give primary concern to its own job—management to managing, union officials to conducting union affairs. In the negotiation and administering of union agreements, they must collaborate, must share the decision-making as to wages, hours, and the other terms which are included in collective bargaining.

But once agreement is reached, each side is responsible for executing its part of the terms agreed upon. Each may aid the other, consult the other, check upon actions of the other; but neither can do the other's job.

Distaste for "Co-determination"

The doctrine that a union should share equally with management in power and responsibility for the administration of the enterprise—"co-determination" as it is termed abroad—appears as distasteful to the great majority of labor leaders in America as it does to management. A sage leader of labor, latterly a servant of his nation in important posts at home and abroad, puts it thus:

Industries cannot operate without skillful planning and direction, nor can they operate purely on the basis of committee decisions or resolutions adopted by mass meetings, conventions or referendum. A clear understanding of functional responsibilities and relationships is a basic require-

ment for the development of a union-management cooperative relationship.⁸³

At the 1951 Convention of the C.I.O., Philip Murray referred to the program of co-determination in Western Germany with apparent sympathy, hinting that it might be likened to the Industry Council Plan which the delegates to the convention approved by resolution. "I believe the time has come when . . . we ought to be thinking in terms of tomorrow," he said. He reminded the delegates that he had pressed the Industry Council Plan in 1938, 1939 and 1940, during which period it was widely discussed, although later "it evidently was forgotten."⁸⁴

If co-determination and the Industry Council Plan have very much in common, the sponsors of the latter may find it difficult to win support from the labor movement. Analyzing the co-determination program in Western Germany with sympathetic understanding of the reasons for the venture in that land, in 1951, an able student expresses doubt that it will take root elsewhere, even if it should prove successful in Germany. "Certainly the danger of the system to the union movement will be more apparent to American union officials than it was to their German colleagues. The extent of labor interest in co-determination in other countries will depend upon the degree to which corporate policy decisions in those countries reflect a sincere desire on the part of management to promote the realization of employee goals."⁸⁵

Writing with a labor-minded engineer as co-author during the period (1940) when the Industry Council Plan was being discussed rather widely, Philip Murray gave expression to this view

To relieve the boss or the management of proper responsibility for making a success of the enterprise is about the last thing any group of employees—organized or unorganized—would consider workable or even desirable. The unions are on record in numerous instances as recognizing that in the last analysis management has to manage, if any concern is to be a success financially or in any other way.⁸⁶

It is most unlikely that the viewpoint of labor officialdom has changed on that score. One may guess that most of the delegates to the C.I.O. Convention of 1951, in voting for the Industry Council resolution, did not intend to commit their unions to so much as a first step in the direction of syndicalism.

For the promotion of the interests of their unions and memberships, union officials in this country have been willing to venture along new paths. But

⁸³ Clinton S. Golden, "Elements of union-management cooperation", *Labor and Nation*, Spring 1950, p. 63.

⁸⁴ Proceedings, 1951 C.I.O. Convention, pp. 253-4.

⁸⁵ William H. McPherson, "Co-determination: Germany's move toward a new Economy", *Industrial and Labor Relations Review*, October 1951, p. 32.

⁸⁶ Morris Cooke and Philip Murray, *Organized Labor and Production*, Harper & Bros., New York City, 1940, p. 84.

their bent is toward holding fast to that which is good, until something else can be shown to be better.

“Opportunity in Social Experimentation”

Experimental steps toward broader participation in decision-making are to be welcomed. Those which prove to be steps backward can be abandoned before much harm is done. Those which contribute toward a fuller utilization of the energies of men will win acceptance in the course of time; no selfish individual or group interest will be able to block them for long.

As World War II was ending, a thoughtful industrialist challenged his fellow-employers to try new ways of bringing unions into partnership for production:

When employers recognize the vital need of developing opportunity for labor to co-operate in production, unions will more widely assume the role predicted for them by their friends . . . Industrial relations will more and more be directed toward progressive industrial methods and national purposes and less and less to defensive stratagem and bargaining. Unions, with their array of leadership and talents, will become a potent force in national productiveness. Hence the resourceful, socially responsible employer regards it as part of his professional duty to develop constructive methods of cooperation with unions—a *real opportunity in social experimentation*.⁸⁷

New ways of joining forces have been tried, and some have shown results that are all to the good. Achievement has been substantial in activities which affect productivity indirectly, accident prevention and apprentice training in particular. As to these matters, organized and systematic cooperation—the sort which we have termed formal—is well adapted.

United effort in these two vital phases of industry—the promotion of safety and the training of apprentices—is so fruitful that unions and managements have joined forces in an organized way at the national level as well as at local levels; and by industry as well as within firms.⁸⁸

Fruitful cooperation in such areas may prepare the way for cooperation in other areas. The nature of the problem will determine the manner in which the cooperative effort will be organized. If the goal is, for illustration, the elimination of wage inequities, the use of committees may be desirable. This

⁸⁷ S. A. Lewisohn, *Human Leadership in Industry*, Harper and Bros., New York, 1945, p. 87 (Emphasis added).

⁸⁸ The National Apprenticeship Program, U. S. Dept. of Labor, Bureau of Apprenticeship, Washington, 1949. Also, see reports of the President's Conference on Industrial Safety, 1949-50, issued as bulletins nos. 130-137 of Bureau of Labor Standards. Of many examples of teamwork for safety at the plant level, we mention only one: "The Joint Safety Program of the Forstmann Woolen Company and Local 656, Textile Workers Union CIO", Rutgers Institute of Management and Labor Relations, 1948.

proved to be the case in the joint attack upon that problem in the steel industry a few years ago. Careful advance planning was essential; progress at each mill of any one Company had to be related to the whole program consistently. Formalizing is not only practical, but inevitable in a venture of such nature.

As to matters that affect productivity directly, cooperation may be better achieved by avoiding formalization. At any rate, this is clearly the view of most managements and most unions, if we are to judge by their conduct.

It is not that there is general distaste for formally recognizing common interest in higher productivity by declarations in collective agreements. Contracts having clauses referring to the need for rising productivity are very common; those which commit the union to some sort of position on improved methods are less common, but not rare.

Productivity Clauses in Agreements

The simplest form of productivity clause is a statement recognizing the need for efficiency in work. A pledge of cooperation toward that goal may be stated. For example:

The union will cooperate with the company to achieve a high level of employee efficiency and performance.

Somewhat more definite, though negative in terms, is a commitment on the union's part to refrain from defending inefficient work, as in this clause:

The union agrees that it will not sanction or condone the restriction of output of any employee below the performance of a reasonable day's work.

More positive are the clauses which pledge cooperation with management in improving methods, reducing waste, developing proficiency of workers. As an illustration, this will serve:

The union recognizes the need for improved methods and output in the interest of the employees and the business, and agrees to cooperate with the employer in the installation of such methods, in suggesting improved methods, and in the education of its members in the necessity for such changes and improvements.

Agreements may contain a clause setting forth rather explicitly the manner in which rising productivity may be accomplished:

It is recognized that the greatest opportunity for increased job security, wages, and other benefits for the employees covered by this Agreement will result from increased productivity. Such increased productivity must, to a large degree, result from improved quality and production standards, increased machine speeds, improved materials and manufacturing processes, and increased productivity on the part of individual employees. The

Company has a responsibility to its employees to see that the above improvements are accomplished and the employees and the Union have a responsibility to assist the Company in the accomplishment of these improvements by fulfilling the basic principle of a full day of effort on the part of each employee.

It is understood and agreed that hourly wage rates are established on the basis of the full utilization of an employee's time throughout the work day.

It is also understood and agreed that where because of physical layout, equipment, material, or methods limitations, the employee may not be fully utilized at all times as defined in the paragraph above, the Company, may, where such conditions exist, increase machine speeds, reduce crew sizes, or combine jobs to fully utilize the employee's time during the work day without increasing the hourly wage rate established for the job.

An interesting approach is found in the master agreement between the Steelworkers and a company having plants in a number of locations. The agreement opens with a definition of "cooperation" and proceeds to state the objectives of the contracting parties, given here in part

Sec. 2 THE UNION'S OBJECTIVES—In the interest of achieving sound industrial relations as well as establishing the kind of cooperation which allows real benefits to all concerned, the Union's ultimate objectives are as follows:

- a. That the plan of Insurance [life and medical] be improved.
- b. That adequate pensions upon retirement or disability be provided for each member of the Union.
- c. That employees of the Company be guaranteed a *minimum* annual wage. . . .
- f. That a plan be developed to provide severance pay for employees whose employment is terminated for any reason other than a resignation or discharge for cause from employment.

The Company recognizes the soundness of the Union's Ultimate Objectives.

Sec. 3 THE COMPANY'S OBJECTIVES—Management is the representative of the owners of the business and is responsible to the owners for operating the business at a profit. Management's objectives, therefore are:

- a. To produce a high quality product that will equal or better competition.
- b. To manufacture the product at a cost which permits the Company to meet sales competition at a profit.
- c. To provide the prompt service necessary in our industry in order to meet seasonal and other customer requirements.

The Union recognizes the soundness of the Company's objectives. To accomplish these objectives the Union agrees that it is necessary that all employees:

Be in attendance and punctual for scheduled work hours, unless unavoidably prevented.

Give such effort to their work as is consistent with reasonable labor standards. . . .

Assist the Company to achieve and improve upon its production standards, production speeds and the production capacity of its equipment by cooperating in the installation of improved methods and other technological improvements, and to suggest other improvements where possible. It is understood that the Company will make such changes and installations after first advising the Local Union Representatives. Also, the Company will cooperate in placing any employees whose jobs are eliminated through such methods or technological improvements.

When such clauses express a real intent by the two parties to work together for the stated goals, the way is paved for teamwork at the union-management level. Words in a contract are not self-enforcing. They will mean, in terms of action, only what the parties want them to mean. If a declaration of common interest in productivity is sincerely entered into, the key men of management and union must show that they mean what they say, in their day-to-day conduct. Differences will arise out of production problems, however earnest the intent to work together. New methods may bring troublesome problems of job assignment, work load, transfer, or even lay-off. Grievances grow out of them. But the pledge to work jointly for productivity implies that such issues will be approached from an efficiency-conscious viewpoint on the union's part, while management will do everything possible to prevent changed techniques from bringing hardship to employees.

Few unions are willing to specify the measures they will take to implement a pledge committing them to help raise productivity. Nor do all employers want to bring such details into their contract. We are not here referring to situations where distrust keeps the joint relation from being a cooperative one. We refer to the situation wherein collective bargaining is conducted on a basis of mutual trust, the parties being confident of their ability to work out solutions to problems of production if and when they arise.

This attitude is a very general one. It is characteristic of most of the unions and employers whose relations have been analyzed in the National Planning Association's series of studies, "Causes of Industrial Peace under Collective Bargaining." It is the attitude of General Motors Corporation and most of the other companies which put the annual "improvement factor" into their contracts. Those contracts usually register the belief that productivity will continue increasing in the future as in the past and that "a cooperative

attitude on the part of all parties in such progress" is important to its continuance. But the union is seldom committed to any specific measures which support management's efforts to raise output per man-hour.

Probably few, if any, of these companies would charge that their unions withhold cooperation, nor would the unions charge the managements with doing so, except possibly as the heat of negotiating new agreements brings forth extreme statements from one side or the other. On the other hand, each side might be reluctant to affirm that the relationship is one of positive cooperation. But the parties have worked out relationships in which collective bargaining has brought effective ways of solving mutual problems and produced a climate favorable to efficient operation. For reasons which seem convincing to them, managements refrain from offering to share responsibility for increasing productivity, and unions refrain from asking to share it.

This may continue to be the prevailing attitude among management and organized labor in this country. It does not hamper teamwork at the level where men are turning out goods and services—in mill or mine or shop. Teamwork for production can be achieved wherever there is competence and mutual respect between those who work and those who direct work, whether union and management work together at the level of accommodation or at the level of cooperation.

Collective Bargaining and Restrictions

A random sampling of current collective agreements will reveal few clauses that impose candid restrictions on efficiency with make-work intent. Such clauses are found in agreements in certain industries, chiefly railroading, printing, the entertainment field, and (in some localities) trucking, building construction and longshoring. Many of these restrictive clauses are of very ancient vintage. Some may have had a useful purpose in their origin. Indeed many are still defended on one ground or another, such as protection of safety and health, or preservation of the quality of apprentice training. When such defenses are genuine, the applicable restriction should not, of course, be classed as a make-work rule. For instance, the rule that electricians must not work singly but in pairs on high-voltage lines is understandable: if one man is injured, the other can give or summon aid. On the other hand, requiring extra men on diesel locomotives—a rule striven for by both the Engineers and the Firemen—was found by two impartial boards (appointed by the President pursuant to the Railway Labor Act) to be unessential to safe operation. Case by case examination would be required before we could expect to know the extent and the cost of collectively bargained rules that are make-work, pure and simple.

Contract clauses do not tell the whole story. Restrictions may be imposed unilaterally by a union, or for that matter by a group of workers acting "on

their own," whether organized or not. This practice appears even where it might be least expected—in situations where piece-work prevails. In the shoe industry, for example, the cutters rather commonly set an upper limit on daily or weekly earnings from piece-work. However, the limit is usually high enough to hamper none but the very fast men, and when assurance is given that high earnings will not be used as an argument for cutting piece-rates, such a practice tends to be dropped. It might well be that unions, by supplying assurance against the cutting of rates, have reduced this kind of restriction.

When payment for work is on a time basis rather than by the piece, group limiting of hourly or daily output is still more difficult to defend, the effect on costs being so much more direct. Defense is rarely offered by spokesmen in those crafts most commonly charged with the practice. Rather, there is apt to be denial that the practice is fostered by the union; and among the international union officers, at any rate, disapproval appears to be general.⁸⁹

Overcoming Restrictive Practices—the Outlook

Outright restrictions upon production (or make-work rules which have the same effect) are so vulnerable that it is small wonder they rarely find expression in collective agreements. Once written into a contract, the only practical way to remove them is through the bargaining process. Some progress along that line has been made in recent years, at least in certain industries; a thorough survey of the period since 1940 might show that sound and realistic bargaining has yielded substantial results. The times have been favorable in one important particular: alternative jobs have not been difficult to find for men displaced by the abandonment of uneconomic working rules.

⁸⁹ National officers sometimes speak out firmly against restriction, reminding erring locals that their union's policy is to support efficiency. For example, *The Electrical Workers' Journal* (IBEW-AFL) of August, 1953 carried an editorial entitled, "Taking Stock Unionwise", in which reference is made to the harm that can be wrought "by demanding too much of employers, . . . by restricting production . . . Remember . . . that it's still the right, the just, the honorable thing to 'give a good day's work for a good day's pay', and when any member of organized labor forgets that, he is stealing, whether his conscience tells him so or not. . . . We must have the employer's interests at heart, if we expect him to have our interests at heart." The editor believes this admonition is needed by only a minority of the members: "For the most part, our members work hard every day and have a real consideration, not just for their own wages and conditions, but for the prosperity of the firm and the employer for whom they work."

The National Labor Relations Board has held that an employee may rightfully refrain from adhering to a group-determined limit on individual output, since the National Labor Relations Act guarantees his right to refrain from, as well as to engage in, concerted activity. If his employer yields to group pressure and discharges him (in the case in point, with union support of the group), the employee wins reinstatement with back pay supplied by employer and union jointly. Decisions of NLRB, volume 94, page 1312 and following.

For example, during the 1940's theater owners reached agreement with local unions of the Motion Picture Operators in cities where new jobs were plentiful and wage-rates rising, to abolish a twenty-year-old rule requiring two men in the projection booth of "first-run" theaters. The rule had originated in the early days of sound-films when disc records supplied the music and the extra man was presumably needed to handle them. Such instances could be multiplied.

A call for joint attack upon restrictive practices was included in the statement, quoted on earlier pages, of the Labor Committee of the National Planning Association in 1947. It read, in part:

There are, as everyone knows, many types of restrictions on production. Some of these have been highlighted by official inquiries. Others, particularly those on the part of labor, have become bywords by reason of widespread publicity given them. It is easy for pot and kettle to call each other black. Management and labor must, however, work together to remove the soot wherever it may be found.

We have called for teamwork between management and labor in improving operations generally. We especially stress the need for such teamwork in overcoming restrictive practices. Teamwork is needed because the restrictive practices of management and of labor so frequently go in pairs. In some cases, the insecurity of markets has led management to restrict output and this in turn has forced workers to adopt restrictions designed to protect their jobs. In other cases workers may have been prompter than management to recognize the threat of insecurity and management's practices may have followed rather than preceded labor's.

We stress insecurity of markets and jobs because we are convinced that this is the root cause of restrictive practices. It follows that, to the extent this insecurity is the result of the swings of the business cycle, a complete solution must include effective policies, public as well as private, to insure a sustained high level of production and employment.

The order is a large one. But probably none of the union leaders who signed the declaration expected that the problem of restriction could be attacked in wholesale fashion. The complete solution involves, as the signers view it, the assurance of high-level employment and production, which in turn involves the control of cyclical swings in business activity. Such a goal is devoutly to be wished for, but its attainment will require mastery of economic forces that are not yet thoroughly understood. And even if the business cycle could be wholly controlled, there would remain other causes of job insecurity, such as shifts in consumer demand from one product to another. If the removal of restrictions from collective agreements should have to wait upon a complete solution of the problem of job insecurity, the wait would be very long.

Rather than expect an immediate solution, we can ask for continuous examination of uneconomic provisions in contracts, the gains being weighed against the costs, and the long-run effects assayed as well as the short-run effects. As Sumner Slichter has pointed out in his thorough and searching analysis of union policies on production matters,⁹⁰ restrictive policies may be retained long after they cease to serve the purpose for their original adoption. And certain policies hurt union members as a group while enhancing the position of a few. These and other disadvantages may arise from the fact that restrictive rules have usually been adopted in piece-meal fashion, no one of them seeming to amount to very much. Thus the total effect may be overlooked.

Each of the individual rules may seem quite fair and defensible, and yet as a body they may produce an effect which no one intended and which is inimical to the interests of the workers themselves. For the workers, though they have an interest in preventing arbitrary decisions by management, also need to have the management able to maintain reasonable efficiency . . .

. . . Collective bargaining may be so operated as either to encourage or to impede the expansion of industry. . . . Whether collective bargaining turns out to be a help or a hindrance . . . will depend in large measure upon whether unions are guided by the short-run or the long-run interests of their members.

Will long-run considerations figure more prominently in the future than they have in the past? Writing in 1940, Slichter was hopeful as to this.

There is a discernible trend for unions to base their policies upon an exploration of the facts and on a more careful and realistic consideration of the long-run effects of their policies. This trend is part of the natural maturing of unions.⁹¹

The trend which Slichter discerned in the years just prior to World War II has been accentuated by events not then foreseeable. The War, the uneasy peace of the late 'forties, and the Korean outbreak taxed our productive capacity to the utmost. The rising rate of population growth has helped to dispel the misgivings about "stagnation" which were not absent, even in sophisticated circles, during the 1930's. The depressed 1930's are not forgotten, but their memory is becoming less of an influence upon current thinking. To millions of young workers, the great depression is no more than an event in history.

⁹⁰ Sumner Slichter, *Union Policies and Industrial Management*, The Brookings Institution, 1941. See also his *Challenge of Industrial Relations*, Cornell University Press, 1947, especially chapter 2. In *Harvard Business Review*, May 1949, see B. M. and S. K. Selekman's article "Productivity and Labor Relations", and in the March 1950 issue, their article "Productivity—and Collective Bargaining".

⁹¹ Quoted passages are from Pages 578-9, 3 of Slichter's book cited in footnote 90.

Of declining influence, too, are the misgivings which used to find so frequent expression in the phrase "technological unemployment." The way-faring man may not wholly comprehend the economist's argument that labor-saving innovations do not reduce total demand for labor. But he knows enough of history to form a practical judgment on the issue. Philip Murray put it in these words, at the last convention of the CIO over which he presided, a year before he died:

I do not know of a single solitary instance where a great technological change has taken place in the United States of America that it has actually thrown people out of work. I do not know of it, I am not aware of it, because the industrial revolution that has taken place in the United States in the course of the past 25 years has brought into the employment field an additional twenty million people.⁹²

The logic of union pressure for constantly rising wages finds increasing acceptance on the part of union leadership. Reading through the issues of any dozen of the better journals of international unions, one can find rather frequent reference to the relation between higher incomes and better production methods, and also to rising productivity as a check upon inflation. There may be significance too, in the growing influence of the industrial engineering departments maintained by a few international unions. "Introduction of industrial engineering into a plant no longer elicits the alarm or fear that it once did," says the engineer who has led in proving that the techniques of good management can be utilized by a strong union in the service of its members.⁹³ The department which he heads "makes no wordy pronouncements about social contributions, industrial progress, etc. It simply believes that in a competitive economy, it is a good idea to have your industry in a sound competitive condition."

Collective bargaining must result in compromise between two extremes:—the sheer engineering efficiency which might yield maximum productivity, and the security against change which might yield greatest peace of mind to workers. Rising productivity, one of the greatest forces for well-being in our time, can be maintained with full consideration of the human element.

But any provision or practice which fetters productivity ought to be subject to continuous scrutiny. Continuance of such practices on the sole ground that they are traditional, is to condone waste of our most precious resource—the skill and effort of men.

⁹² Proceedings, 1951 Convention, CIO, p. 444.

⁹³ William Gomberg of the International Ladies' Garment Workers Union, writing in *The House of Labor*, edited by J. B. S. Hardman and M. F. Neufeld. Prentice-Hall, Inc., 1951, pp. 268-91. Consult also Jean Trepp McKelvy, *AFL Attitudes toward Production 1900-1932*, Cornell University, Ithaca, New York, 1952.

The common interest in achieving the highest national product ought to prevail over the narrow interest of any group, whether it be management or union. Expressions of this vital principle are not lacking in the pronouncements of thoughtful men. An influential labor leader has put it thus:

In the complex and interdependent world in which we live labor and management have a tremendous responsibility to the whole community. This joint responsibility of labor and management transcends the responsibility that either has to its special economic group. Decisions in the field of collective bargaining must reflect progress for the whole community. Industrial tension will be minimized only if labor and management demonstrate the capacity for leadership to elevate collective bargaining above the status of a never-ending struggle between competing pressure groups and make collective bargaining a joint exploring of basic economic facts in search of answers that will advance the welfare of the whole community.⁹⁴

⁹⁴ Walter Reuther quoted from Gompers centenary issue of the *A. F. L. Trade Union Courier*, by Edwin G. Nourse, in *The 1950's Come First* (New York, Henry Holt and Company, 1951), p. 53.

VII. Plans and Formulas--or Fundamentals?

If a number of thoughtful persons were . . . asked "what is the most important product of a country's structure of industry?" there is little doubt that the prevailing answer would be, not "material" goods and services, or objective or marketable gratifications, but people: healthy and well-energized people with strong and kindly characters and well-rounded development of mental and physical capacities; people who experience and value freedom because they understand and assume the burdens of achieving it, maintaining it and using, not abusing it; people with roots in the past, maintaining continuity between the past and the changing future; people who belong to a community and are well-adjusted and cooperating members of it.

—John M. Clark

REALIZATION OF COMMON INTERESTS and shared understanding of essentials of successful operation; sound organization and competent leadership—these promote cooperation. But to evoke the best efforts of men, may there not be some formula for fusing the elements from which genuine teamwork for productivity is forged? Is there some plan which induces people to give their best to the job to be done, not in spurts of strenuous effort, but in a sustained and natural way; each doing not only what is expected of him, but willingly performing beyond that point when the need arises?

Answers are offered in variety. Advocates of a particular system of incentive compensation hold that a direct monetary reward for extra effort will provide the answer. Some argue for pure and simple piece-work; others advocate a variant form of wage-incentive. Group piece-rates and group bonuses have their proponents; a system providing for a plant-wide bonus for extra production is preferred by others.

Such plans meet the challenge of our question only if they call forth teamwork of a truly robust kind, rather than concern as to how one will be rewarded as an individual, or as a member of a small work-group. Our goal is teamwork that expresses larger interests and broader loyalties.

Is There a Formula for Superlative Teamwork?

There has been earnest search for a plan which can make vivid to the individual his stake in the enterprise's success. Each of several plans has its advocates. Some have proven advantageous if wisely inaugurated and ably administered. Not all have yet been tested in adversity; some may prove to be fair weather plans only.

Profit sharing has, for a century or more, been advocated by some as the best method of linking the fortunes of an enterprise to the advantage of the employees. There has been heavy mortality among profit sharing plans, especially in periods when profits were low or absent. But a few plans have endured, through good times and bad, for several decades. No doubt these would be pronounced successful according to almost any practical measure of success that comes to mind.

Yet the thoughtful advocate of profit sharing is reluctant to stress the financial rewards as the chief element in the plans that have endured. The Council of Profit Sharing Industries, an organization doing commendable work along educational lines, has emphasized in its declaration of principles that profit sharing "is not an end in itself but a means of bringing about teamwork. Employee participation in the firm's profits is only one means among many of bringing about cooperation. More important than the money value of profit sharing seems to be the feeling of belonging, security and opportunity that the spirit of true profit sharing engenders."⁹⁵

Plans which provide for the sharing of labor-saving gains, rather than of profits, have been advocated. Of plans which afford group benefit for group reduction of labor costs, the Scanlon plan is perhaps best known. Its author refrains from fixing a definite formula for his plan; but typically it establishes, on the basis of past experience, the "normal" ratio of labor cost to production values (payroll cost per sales dollar) of the enterprise adopting the plan. This ratio may be, for instance, 30 per cent. Thereafter, in any month showing a ratio lower than 30 per cent, all employees share in the difference (or saving) in proportion to their respective wages for that month—incentive earnings being excluded from the computation as constituting a bonus already paid.⁹⁶

⁹⁵ *Profit Sharing Manual*, Council of Profit Sharing Industries, Columbus, Ohio, 1948, p. 7.

⁹⁶ Joseph Scanlon, "Profit Sharing under Collective Bargaining: Three Case Studies" in *Industrial and Labor Relations Review*, October 1948. See also Russell W. Davenport, "Enterprise for Everyman" in *Fortune*, January, 1950. The Scanlon plan resembles, in its sharing aspects, the earlier plan of the Nunn-Bush Shoe Company and the Share-of-Production plan of A. W. Rucker. For an excellent summary-analysis of plans for sharing gains, see Ernest Dale, *Greater Productivity through Labor-Management Cooperation*, American Management Association, New York, 1949, pp. 113-121.

Like most other advocates of plans which involve sharing gains, Scanlon emphasizes the non-financial incentives of his proposal rather more than the monetary incentive. Joint committees of labor and management are established to gather and pass upon suggestions as to how methods can be improved and effort saved. Thus, believe Scanlon and those who have adopted his plan, a vivid sense of participation in teamwork for productivity is achieved.

Stress upon intangibles is found in the philosophy of even that intrepid advocate of "incentive management", James F. Lincoln. He differs from many other profit-sharing employers in his view that each employee's reward must accurately and directly measure the contribution of that individual. Not only is there "no other possible method of fairly rewarding production than by piecework payment" as he sees it, but even in dividing profits among employees, each man must "be rewarded in accordance with his contribution to the progress of the company and on no other basis." Nevertheless, he has this to say:

There is no doubt that the added income has its attraction to the worker, but that is not the real point. The source of the enthusiastic cooperation found in proper incentive management stems from the feeling that all have of uniting their efforts in one activity which they regard as worth while and to which their contribution is recognized and is real. It is the playing of the game that is most important in developing this cooperation.⁹⁷

That idea recurs in various form in most analyses of plans for enhancing employee interest in productivity. The financial return for extra effort, individual or group, may appear to be the central part of the pattern; nonetheless, it is the *pattern as a whole* which counts. If the pattern as a whole supplies meaningful and rewarding experience to the people who work in an organization, there is "plan" enough.

Common Elements in Patterns of Teamwork

Patterns of effective teamwork for productivity differ in warp and weft, but common threads will be found in them.

Some of these are tangible things essential to satisfaction in work. Fair compensation for skill and effort there must be, geared in some measure, though not necessarily with precision, to individual or group performance. Conditions of work will be consonant with health and safety and self-respect. Employment will be as steady as is possible within the limits of managerial control.

Other elements of good personnel administration will be found also. Some of these must receive more stress in large organizations than in small

⁹⁷ James F. Lincoln, *Lincoln's Incentive System*, McGraw-Hill Company, New York, 1946, pp. 43, 163 and 167 contain the quoted items.

ones, but they cannot be taken for granted in any case, according to Thomas G. Spates, former Vice President of General Foods Corporation. They include:

. . . Careful placement and adequate training enabling each employee to perform his assignment competently and to know how it contributes to the whole.

. . . Continuous examination of job content with a view to keeping monotony to a minimum and making each job hold as much interest as possible.

. . . A planned program of upgrading and promotion, so administered as to invite belief that individual worth will win recognition.

. . . Assurance that suggestions, requests, and complaints will be received cordially, and that answers will be forthcoming.

. . . Consultation about changes that affect the individual in advance of the changes.

. . . Periodic review of individual performance so that each employee, and particularly each supervisor, can know the answer to that most important question, "How am I doing?"

Still other elements will be striven for, along routes more easily pointed out than traveled; the degree to which they can be attained will greatly vary with circumstance. This can be said of democratic decision-making, and of sharing widely the satisfaction yielded by participation in planning and other creative phases of work. In no other area of employee-employer relations have we greater need for pioneering experiment and careful evaluation of result.

Searching for a touchstone, a word or phrase to focus attention upon the fundamental thing, students and practitioners of the art of management make various selections. Underlying most of the concepts is the idea implicit in the phrase "mutual understanding". The quest for a formula for teamwork cannot end there, but it may well begin there.

An understanding relationship between people who work together is an achievement; like other achievements, it requires effort. But we can believe that it is in the nature of things for men to understand one another, because the satisfaction it yields is so readily perceived and esteemed. John Dewey has said that, "Human beings combine in behavior as directly and unconsciously as do atoms, stellar masses and cells." But he adds that associated activity is built into true mutuality, and an association is forged into a genuine community, only as its consequences are esteemed and sought for. To this end, there must be the give and take of communication, participation of a meaningful kind, and a sharing of results.⁹⁸

⁹⁸ *John Dewey's Philosophy*, edited by Joseph Ratner, Modern Library, New York, 1939, p. 385 and following.

The philosopher was not writing instructions for industrial management, yet his observations point directly to our theme. Participation, communication, sharing are essentials of effective teamwork for productivity, as for all associated behavior which is to have enduring success. Goodwill is important too, but is perhaps more a result than a condition. Once achieved, it is seen as one of the best fruits that teamwork yields.

Consequences of Teamwork: Tangible and Intangible

The meaning of teamwork for productivity becomes clear through its consequences. They are tangible in part—more goods to be enjoyed—and these are to be desired. But the intangible consequences, too, yield satisfaction to which few people are indifferent: the pride which accomplishment brings, the zest of association with others in productive effort, the recognition of useful work well done.

Not all men and women yearn for these things in equal measure: fortunate it is, too. For some work must be done alone—and there are those who prefer working alone to working with a team. Some work is humdrum, offering little return except pay; it would be well if there were some way of giving such jobs to those, and only those, who can find contentment therewith. But to expect a perfect equation between what jobs offer and what their holders expect is to set our sights at the moon.

Yet sights can be raised. Though this is chiefly the task of management, others can also have a part. Although leadership is important (signals must be called, and called right) much also depends upon “followership.” Results are achieved only by action on the team’s part, following the signals. In the humblest position on the team, as in the highest position, honest effort plays its part.

The leaders of unions can exert an influence on the elevation of our sights, by what they do and say and by what they refrain from doing and saying. A union official can hardly be expected to exhort his members to work more strenuously. But the union leader *can* be expected *not* to hamper management in performing its functions of maintaining morale and discipline; not to make the ancient and honorable motto of unionism, “A fair day’s pay for a fair day’s work” appear to be a one-way street; not to claim, as champion of the worker’s rights, the right to champion any worker in withholding a fair day’s work. In this area, the attitudes of the membership are of utmost importance; hence the ordinary union member can have a part in determining how high our sights can be raised.

The American people have a right to ask that union goals and policies, no less than management goals and policies, be formulated with a view to the common interest in industrial progress, rather than with sole emphasis upon the narrow and immediate gains of a group.

Finally, citizenship in the community has some relation, surely, to citizenship in the world of work. It is not claimed that progress in the one realm causes progress in the other; probably the relation is one of mutual interaction, as in human affairs generally. But as men and women participate more intelligently in affairs of their community—strive for the responsible and efficient conduct of civic affairs—they strengthen the forces that foster mutuality in economic affairs. If it could be measured, the level of teamwork among the citizens of a community might be found to correlate clearly with the level of teamwork among employers and employees in the community.

On the national level, also, the relationship between good citizenship and economic progress can be seen. The peoples of the world have maintained dignity and decency in living in approximate ratio to their determination to hold firmly to democratic fundamentals. Productivity is highest in those lands where ideas and opinions, no less than goods and services, must win their way in fair and free competition in the market; where persuasion is preferred to coercion, and where the general good is held superior to the interests of occupational or other groups.

APPENDIX A

A CHECK LIST FOR MANAGEMENT TO BUILD EMPLOYEE UNDERSTANDING AND TEAMWORK FOR GREATER PRODUCTIVITY WITHIN THE ENTERPRISE

Teamwork for productivity within the enterprise is an achievement toward which the following measures or attitudes may contribute. They are presented here as criteria against which management can evaluate its present policies and practices.

I. *Promoting Understanding of Common Goals and Mutual Interests:*

A. Opportunity is afforded each person in the enterprise to become informed about:

- () The organization of the enterprise
- () Its products
- () Its competitive situation
- () Promotion and selling policies
- () Other information which promotes understanding of the economics of the enterprise and the industry
- () The source of the enterprise's income and its distribution
- () The nature of depreciation reserves, reinvestment of earnings and other important financial aspects
- () Plans and prospects for the future
- () Policies and practices which bear upon the employee-employer relationship
- () The basis of wage and salary determination.

B. Methods for learning about these things:

- () Are carefully chosen with a view to their effectiveness in fostering understanding.

- () Utilize the supervisor as the channel of communication insofar as practicable. Inform supervisors in advance when other channels are preferred.
- C. () Underlying management's planning is the conviction that rising *productivity* should not be accompanied by reduced opportunity for employment. Therefore every feasible measure is taken to assure against layoff as a consequence of rising productivity.
 - () If improved techniques call for transfers, acquisition of new skills or other changes affecting employees, every effort is exerted to ease the adjustments involved. Preceding each step there is consultation with those who will be affected, and with their bargaining representative, if one exists.
 - () Careful consideration is given to every technique which may serve to regularize employment, and employees are made aware of this, by management's words and deeds.
 - () When layoff is unavoidable, notice and explanation are given well in advance.

II. *Building Team Spirit:*

- A. () Among those at the highest level of management, teamwork is thorough and unflinching, providing example and pattern for teamwork at each succeeding level.
 - () The organizational structure fosters a natural, unstrained relationship between supervisors and subordinates, down through all levels. The caste-system is conspicuously absent.
 - () Within each level and between levels, there is consultation about problems and plans; free exchange of ideas precedes the making of important decisions.
 - () Participant activity is similarly encouraged by each first-level supervisor, the ideal being a goodly measure of sharing in the planning and goal-setting in each "team" (section, unit or other subdivision of the organization) at the work level.
- B. () Ranking very high among the personal factors which lead to promotion is ability to provide democratic leadership—to win whole-hearted cooperation with a minimal assertion of authority.

- () To promote the continuous improvement of leadership performance, experience and ideas are exchanged among members of management. A competent executive has been given responsibility for promoting this cooperative search for better ways, and for keeping informed of experience and research in this area.
- () Superlative performance on the part of a team wins commendation as readily as the superlative performance of an individual. The fostering of pride in team success is seen to be compatible with pride in individual achievement.
- C. () In collective bargaining, sound and constructive relations are striven for, to the end that the union may contribute to team-work spirit within the enterprise, insofar as it is willing and able to do so.
- () Where a mature and responsible collective bargaining relationship has been established, committeemen of the union are given reason to feel that they may, if they wish, cooperate in encouraging their members to understand and participate in common objectives.
- () In pursuing these goals, management accepts the idea of mutuality of loyalties on the unionized employee's part; loyalty to union is seen as consistent with loyalty to the enterprise.

III. *Provision of Conditions Favorable to Work Effectiveness and Job Satisfaction:*

- A. () Each member of management recognizes that his own productivity is an important factor in the productivity of his people.
- () Measures and facilities that contribute to high output per man-hour are provided, and undergo continuous examination for possible improvement.
- () Conditions of work are consonant with health and safety and self-respect.
- B. Everyone in the enterprise has been adequately informed regarding:
 - His functions
 - () What they are
 - () How to perform them competently

To whom he looks—

- () For instructions and guidance
- () For appraisal of his performance
- () For counsel in preparing for the next step upward.

How his functions relate to those of others, especially

- () Those to whom he may turn for services helpful to getting his work done, as need may arise
- () Those to whom he may render services.

C. Suggestions as to work improvement are:

- () Cordially received
- () Competently examined
- () Given recognition commensurate with their merit.

D. Supervisors are prompt to give:

- () Answers to questions and requests
- () Decisions upon matters raised by employer.

E. Management is alert to possibilities of enhancing interest in work through

- () Job rotation
- () Job enlargement
- () Methods study
- () Other appropriate means.

F. () The entire pattern of the employment relationship expresses management's conviction that good human relations are a major goal as important as any other goal of the enterprise.

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