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INDUSTRIAL RELATIONS
RESEARCH ASSOCIATION

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PREFACE

The IRRA's Eleventh Annual Meeting discussed issues of pressing current concern as well as matters of continuing interest to researchers, practitioners, and teachers in the industrial relations field. As in previous years, topics and participants reflected the interdisciplinary and tripartite nature of the Association's membership.

Four problems which have recently been the focus of national attention were discussed by representatives of business, unions, universities, and government: the problems posed by automation, modifications in unemployment insurance, wage-price issues, and control of internal union affairs. Three remaining sessions were concerned with an evaluation of the role of industrial relations. Union and management officials were asked to appraise the value of industrial relations research in their operations; social scientists discussed the usefulness of industrial relations research in their separate disciplines; and management, union, and university personnel evaluated the effectiveness of industrial relations education.

The Presidential Address traced the development of union-management relations in the last twelve years and assessed the causative factors shaping the attitudes of the parties.

The Association is indebted to the chairmen and participants for their contributions to the success of the meetings, and to the authors who cooperated in making their papers and comments available for publication.

GERALD G. SOMERS, *Editor*

Madison, Wisconsin

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Part I

PRESIDENTIAL ADDRESS

MUTUAL SURVIVAL AFTER TWELVE YEARS

E. WIGHT BAKKE

Yale University

Choosing a subject for a Presidential address is a difficult job. It is obviously no place to give a report on one's current research. Neither is it a platform from which to champion a cause. Since there is no chance for anyone to talk back, a one-sided debate on a controversial issue would be most inappropriate. One does, of course, have moments of temptation to play the prophet in the faint hope that 50 years from now one of our successors, as yet unborn, will point back to the browning pages of the 1958 Annual Proceedings, and give one of the points made a respectful footnote, probably with the accompanying comment that, given the author's and the subject's limitations at that time, he called the shots pretty well. But one soon realizes how presumptuous that ambition is and is satisfied with a humbler role.

The subject, however, should somehow be appropriate to the speaker and the group to whom he speaks. And it occurred to me that at about the time the IRRA was being organized I had just finished a little book called *Mutual Survival* in which I tried to report how management and labor leaders viewed each other and some of the obstacles to productive relations raised by those views. It occurred to me that it might be of interest for us to reassess that situation by taking a look at what has happened in these dozen years of the parties' attempts at Mutual Survival.

There were plenty of obstacles to productive labor-management relations in those years right after the war. Most of them are still with us. Some of them have been reduced in potency by the mere fact that men on both sides have learned their jobs better and have learned to work together because they *had* to work together. Some of them have been reduced by the retirement from the scene of men in management and unions whose training and predispositions were, to put it as kindly as possible, unsuited to the tasks of the moment. Many of these are now enjoying in the great beyond the rewards of their efforts here on earth. They await the arrival on those distant shores of a number of their comrades in arms whose funerals have been somewhat delayed.

But it is fair to say that no obstacles have stood in the way of the development of a kind of collective bargaining which I believe

provides a foundation for the straightening out of unavoidable and inevitable differences between people who work and the people they work for, which is sounder than that existing in any major country in the world.

Our sanguine optimism of 12 years ago, that the passage of time would cure many of our difficulties has, however, had to be replaced by a more realistic recognition that time is simply the framework in which what *has* happened determines what *does* happen and *is going* to happen.

Twelve years ago there seemed to me to be one obstacle to productive working relations between union and management leadership which dwarfed all the others. What was it? It was that both management and labor leaders had suddenly waked up to the fact that a basic shift was taking place in their relative power and prestige in industry and the community, and they saw every event, big and small, affecting that shift.

That fact hadn't really struck home before the war. The significance of the extraordinary growth of trade union membership in the 5 years following the Wagner Act did not, before the war, strike management as a *permanent* threat to the economic power and control they continued to exercise in areas other than the determination of wages, hours, and working conditions. It is true they were disturbed and oftentimes angry but they were not lacking in confidence that, as one of them said to me, "The worm will turn." Labor leaders of old and young unions were still as much concerned about their power relative to each other as about their power relative to management.

Then came preoccupation with war production and the leadership of both groups faced a common challenge. On the whole they met it in a spirit of partnership. There was plenty of disagreement, but they were concerned more with developing power *for* getting a big job done than in gaining power *over* each other.

But with a return, at the close of the war, to relatively free collective bargaining and the open pitting of strength against strength, it became obvious that something lasting had happened in the power structure. Labor leaders had consolidated their memberships through services rendered, through organizational arrangements, through internal political machines. They had become familiar and influential people in political and governmental circles. The names of many of them were now more familiar to the man on the street than the names of prominent industrialists and businessmen. And they shared, in

the public's estimation, the credit for patriotism and devoted effort in the winning of the war.

Labor leaders gave ample evidence that they were aware of, and confident in their newly won power. Wage demands for 30¢ an hour startled not only management but ordinary citizens accustomed to think of 10¢ an hour as a normal bargaining demand. "Out with maintenance of membership" was the cry, "We demand real union security, the closed or the union shop." Strikes of widespread proportions causing grave inconvenience and real hardship to the public were threatened and called, and in many cases carried through to successful but costly conclusions. At least a few outstanding and photogenic labor leaders appeared to many people to consider themselves and their unions strong enough to challenge even the U. S. government.

Management, supported by many startled middle-class people and farmers and their political representatives, raised the cry "Restore the balance!"

In this atmosphere the Taft Hartley Act was passed, and in public conferences and private conversations a worried management discussed industrial relations strategies for *containing* or *countering* the new power of unions. This atmosphere covered the country when I wrote *Mutual Survival*. In that atmosphere no issue seemed a minor one because in such a period of changing forces no one could be certain what impact a small gain or loss might have upon the basic issue. And that basic issue was that both management and labor leaders appeared to the other to be attempting to accumulate or regain power and sovereignty for their own organizations in ways that threatened the power and the sovereignty of the other.

That is still the basic issue. In some ways it isn't as stubborn as it was then. But in other and important ways it is more stubborn. It is less stubborn as a personal problem of particular managers and labor leaders adjusting their self-conceptions and their feelings to a new relative power and prestige relationship between them. It is more stubborn as an organizational problem of particular institutions, companies and unions, adjusting their policies and practices to a developing and hardening relative power relationship between institutions.

Let's look at the bright side of the picture first. No one who talked with management and labor 10-12 years ago could miss the fact that in many cases they took the shift in power situation personally. Both of them knew, and all the rest of us knew, that labor

leaders had risen rapidly in their ability to influence the course of events in this country. Moreover, their gain had been accomplished at the expense of some of the power and prestige formerly possessed by management. Being an egghead at that time—I still am—I was inclined to take the long view in something like these words :

A century and a half ago business enterprisers offered the same challenge to the landed gentry. In those days businessmen were in the saddle riding their steeds with enthusiasm toward a grand and glorious new day which their efforts were to make possible. Today labor leaders are feeling the same sense of power and promise.

It is characteristic of socially, economically and politically powerful groups to interpret a decrease in their power as a personal defeat and a threat to the whole structure of the society. It is characteristic of groups on the make to interpret their advances as a personal victory and a step forward in the march of progress. The result is likely to be an attitude of frustration and bitterness on the one hand, and of swashbuckling and self-righteousness on the other. People with these attitudes do not make good partners in cooperative activity.

We've got over that situation in remarkably short time. There are still a few glaring examples of labor leaders whose public pronouncements and actions indicate a desire to play God or the Devil, and an apparent belief they can do so with impunity. There are still some stalwart management defenders of themselves and of most everybody in general against the powers of unions who think of these powers in personal terms, and consequently focus their attack upon individual labor leaders whom they picture as riding high, wide, and handsome over the interests of workers, management, consumers, the bill of rights, mother, home, the flag, and the republican form of government. Such labor leaders make good newspaper copy. They are made to order for dramatic congressional investigations. They provide anti-union pamphleteers with vivid action pictures of unethical, and power-hungry labor bosses which by clever rhetorical manipulation can be ascribed to other labor leaders for which no adequate evidence of this sort is available.

But today the basic pattern of personal leadership among the new labor men of power is one, not of swashbuckling across the stage in a novel and unaccustomed role, but one of sober and responsible and hard-working acceptance of a tough job, the job of managing an adequate institutional safeguard and expression of the

legitimate human interests of 16 million workers and their families in dealings with the management employing these people who constitute the best collection of business and industrial brains and manage the largest financial and technical resources the world has ever known. And the basic pattern of reaction among management people who have to deal with the great majority of these labor leaders is one not of licking personal wounds of injured vanity, but sober and responsible and hard working acceptance of a tough job, the job of managing a company so it can get its basic purpose accomplished of producing goods and services at a profit, and doing that in the face of the necessity of sharing essential decisions with a smarter and more competent group of union bargainers than this country has ever known before.

That's good. Both management and labor leaders on the whole are taking a loss or gain of power less personally, and are more concerned about the impact of the shifting power relations on their companies and unions as organizations. Nevertheless the relations between those organizations themselves, and therefore the people who manage them, seem to me to be hardening into a pattern of fairly antagonistic foreign relations between two separate institutions who disagree on many basic issues and in which the chief aim is *dealing* with each other rather than *cooperating* with each other.

Perhaps that is as it must be. I am inclined to think it is. Perhaps it is even as it *should be*. I make no moral judgment about the situation or upon those whose actions in the area of labor and management relations produce that pattern. And before I have finished this talk, I shall hope to make clear that not only are the antagonisms inevitable and legitimate in the relationship, but that their clear and powerful straight-forward expression can lead to productive results if—and it is a big IF—those antagonisms do not harden around the people who hold them so that they lose their capacity to adjust themselves to each other and to the changing economic and social conditions that face them with a common challenge. Antagonisms are useful as challenges—not as straightjackets.

Let me restate the basic antagonistic pattern of behavior between the parties which 12 years ago seemed to me to stand in the way of productive relations. Both management and labor leaders appeared to the other to be trying to accumulate or regain power and sovereignty for their own organizations in ways that threaten the power and the sovereignty of the other. And my impression is that the

dominant pattern of struggling for separate power over the other and the countering of the other fellow's efforts is beginning to harden, and that is leading to a hardening of antagonistic predispositions on both sides that make adjustment more difficult.

That hardening *was* not and *is* not inevitable. It is caused. It is caused 1) by the particular approach the parties have chosen to building up their power. It is caused 2) by certain conceptions the parties have about what power is. It is caused 3) by certain methods they have used to accumulate it. It is caused 4) by the concentration of their joint efforts on negative, almost to the exclusion of positive, objectives. These are the things I'd like to talk about here today.

Consider first the approaches organizations might use to building up their power. I'm going to define the degree of power very simply as the degree of freedom and ability of an organization to accomplish its objectives. What approaches are available for raising that degree?

The first major approach to power accumulation is to improve the organization's own independent resources and to use them more effectively and efficiently. That method of developing internal, independent integration, strength, and competent administration may present the other fellow with problems but such problems are expected and considered a part of the game. They do *not necessarily* lead to antagonism.

A second approach is for Organization A to try to influence the decisions and actions of Organization B so that they are compatible with A achieving its purpose. This type of power development is not particularly welcomed by Organization B which is, of course, on the receiving end, but it is recognized as legitimate as long as it does not involve something called "taking unfair advantages." An unfair advantage is defined as anything A does that exerts enough pressure so that B is not able to choose his course solely on the grounds of advantages to his own organization, or which jockeys B into a position where his choice is really Hobson's choice.

The third avenue to the acquisition of power is the one that really makes the parties sore. It is the method of weakening one's competitor, or limiting the things he is permitted to do.

There is still another way Organization A can achieve power or the freedom and ability to reach its objectives whenever the reaching involves joint effort with Organization B. That is to contribute to increasing the resources and active strength of Organization B so that B's collaboration can be more effective in that associated activity.

It may appear to some of you that even to mention this last possibility is evidence that I am an unregenerated Utopian. The truth is that I am. But that shall not prevent me from acknowledging that this last form of power accumulation has aroused relatively little enthusiasm and even less energetic effort from the parties involved in the last twelve years.

Here we have at least four avenues to power accumulation. All have been used. But each party gets the impression that the other is working especially hard on the second and third approaches. That is, they see the other organization trying to increase its own power by acting on them, especially by using methods which are considered coercive and therefore unfair, or by attempting to weaken them or limit the activities permitted them. Their reaction to such attempts is short and bitter: "They are trying to cut us down to size." That general conclusion sets the tone of the relationship and colors the interpretation placed upon even many relatively insignificant actions.

Second, the meanings the parties have tended to emphasize in their ideas about power also contributed to a hardening of the antagonistic elements in their relationship. Take a look at several of these meanings and see how they affect the situation.

I'm not concerned at the moment whether these meanings are right or wrong. But right or wrong, defensible or not, they are the meanings people have and with which they appraise their own and other people's actions, and decide what they ought to do about it. And what they are doing about it seems to me to be resulting in a hardening of the relationship into what Sumner called "antagonistic cooperation," but with the emphasis on the first word. What are some of these conceptions of power?

In the first place they have been chiefly concerned, management and labor leaders, with the *relative* aspects of power. Make no mistake, they *have to be* concerned with the relative aspects of power. But when that idea *predominates*, the leaders of each organization look at the successful or unsuccessful efforts of the other to develop even *internal* strength, as something which decreases or increases respectively the strength of their own organization. When power is considered to be almost exclusively relative power, it is a common sense inference that if the other fellow gets stronger, you get weaker, and if he has less power, you have more.

Now it is no secret that most companies and unions in the U.S. have grown considerably in their power to bargain. Internally they are getting stronger, better organized, more skilful in bargaining, bet-

ter prepared to bargain, more sophisticated, and better able to take a strike if bargaining breaks down. Both management and union leaders know that about the other because the job of bargaining gets tougher each time. This is an experience every leader on both sides has. Now if he is almost exclusively preoccupied with the idea that power is *relative* power, the experience creates an anxiety about his ability to keep his organization up in the race. The other fellow he feels is getting *too* strong. This basic anxiety I want to emphasize is created by an immediate and vivid experience every one has. It is not created, it is only embellished and given support, by the polemics against big labor monopolies on the one hand and big business oligarchies on the other. But against the background of that personal experience that the other fellow is getting harder, not easier, to deal with, it is easy to accept the polemics as gospel. And according to that gospel, one way to increase your own power is to limit that of the other fellow.

Another way in which internal independent power of a company or union can be developed is by getting employees or members to be more enthusiastic and active and cooperative in the interests of the company or union, as the case may be. Any manager or leader of any organization has to do that. It is just one of his elementary jobs. Whether you call it developing good team work and workmanship, as management does, or group solidarity, as the union leaders do, you are talking about what everyone knows is an important organizational power resource and is essential if the organization is to function at all. Moreover, I can't imagine any more difficult job over the long pull for either management or labor leaders than having to bargain with an organization whose members or employees weren't genuinely committed to the welfare of their union or their company respectively.

You might think, therefore, that each party would welcome, or at least not be worried about, the best possible job the other was doing in developing this kind of internal power. Not when folks are preoccupied with the relative aspects of power. When that is the point of view that dominates, this legitimate process of internal integration is looked at as a *competition* for loyalty, and every evidence of success of one leadership looked upon by the other as a defeat of their own efforts.

In spite of conclusions, well documented by research, that this loyalty issue is a false one in most circumstances and that dual loyalties are not only possible but natural, this antagonism-generating in-

terpretation of the efforts of leaders to integrate participants around their own organizational objectives still persists.

It persists in the minds of labor leaders as well as of management. Note the recurrent allegations of labor leaders that management's human relations efforts are just another way of trying to transfer the loyalties of workers from the union to the company. Note the apparent verification of this suspicion by the efforts of some managements to preserve the development and administration of benefits and various types of bonuses as an area of unilateral company action, and their concern about forestalling union organization among occupational groups not yet organized by setting up human relations programs for them.

I don't cite these examples to criticize what leaders are doing to make workers enthusiastic and loyal supporters of the company or the union, nor to criticize their reaction to what the other fellow is doing. That reaction is natural when one thinks of the power one is trying to develop through participant support as *relative* power. But that reaction is one of the factors hardening the relationship of antagonistic cooperation in the direction of antagonism rather than cooperation.

Let me repeat. The concern with relative power is legitimate and absolutely necessary in any situation where two organizations are trying, as they are in industrial relations, to influence the actions of each other. I'm talking about what happens when that is the *only* kind of power they can think of. That leads them to interpret the increase in internal power of the other as something taken away from them, and that interpretation hardens antagonisms.

Another idea about power which has a bearing on the hardening of antagonisms is the very natural one that power is a function of being able to use tried and tested methods. It follows that management and union leaders believe they are *losing* power when they have to change their methods of operation, when conditions make it necessary for them to place less reliance on the traditional methods they are trained in and used to. They have got used to thinking of those methods not only as right, but the freedom to use them as their right. Finding it difficult or impossible to use them, they feel they have lost power.

The situation I'm referring to is well known to every manager and union leader. The entrance of the union was the condition that faced management with this necessity. It is not an exaggeration to say that **when collective bargaining became** a part of operations of a company,

managerial methods underwent a revolution greater than would have been the case if those companies had been nationalized. That revolution, to define it very briefly but adequately, was this. Company managers became virtually *co-managers* with labor leaders in limited but expanding areas where they were formerly *solo* managers, in setting a whole set of high level and general company policies in those areas and in the detailed execution of those policies. And the labor leader "co-manager" was not accountable to the same higher authority who held the company manager responsible for the results of his decisions and acts. Anyone who thinks that the shift from a single line managership to this type of virtual co-managership didn't involve a revolution in the methods of organizational decision making and operations is either blind or uninformed.

It is no wonder that company managers interpreted this necessity to change old methods and take up and learn new ones as a loss in power. The loss of power to get things done *in the old familiar ways*, under the old arrangements of authority and accountability, is understandably interpreted as the loss of power—*period*. Today the early reaction in the face of this revolution—"protect and maintain managerial prerogatives," has been rephrased. The present position is "preserve necessary managerial functions for agents of the company." The change is merely literary. The issue is the same. And it will take more than one generation of managers to work out the orientation and methods appropriate to the situation. And they cannot work it out alone. The union leaders will see to that.

The President's Conference right after the war broke up essentially because of the inability to resolve that issue. If another such conference held today didn't suffer the same fate, it would be because the parties agreed to avoid the issue. To the credit of American managers in general, let it be said that on the whole they've stopped *talking* general principles on this matter and are *acting* on each case as it arises. But the underlying strategy and mood is that of a rear-guard action seeking to restrict the union's encroachment on their freedom and discretion in managing. And every time a new regulation of that freedom gets into a contract, management feels it has lost just that much power. Their perception of the situation is that the union which demanded and got the regulation has succeeded in their effort to cut management's power down to size. And I don't think any union man will deny that that *is* the objective.

The unions also face attempts to restrict their use of traditional methods. They also look at the failure successfully to resist these at-

tempts as a loss of power. But the changing situation has called into question old methods for them as it has for management. The traditional methods of unions were born in an era of desperate struggle even for recognition and the right to exist at all. The last stages of that struggle before the rapid growth of unions in the Thirties and the Forties was a knock-down and drag-out civil war. Moreover, outside of a few unions like those on the railroads and in coal, the area of effective bargaining was relatively restricted and the damage caused by disputes and struggles didn't run like blood poisoning through the arteries of the whole economy. In that atmosphere developed methods of reasonable and peaceful negotiation and bargaining wherever these were possible. But there were developed as well the tactics to be used when negotiations broke down or were refused. And since they had to count on these methods so often, their effective use was equated with union power: the organizational strike, the strike to force specific demands, the sympathy strike, the demonstration strike, mass picketing, the boycott both primary and secondary, on-the-job action including the slowdown and sabotage, and some of the less savory kinds of racketeering and coercive tactics directed both against the slow joiners and anti-union employers. Even the trade agreement was in many cases a treaty of temporary peace setting forth the terms imposed by the victor on the vanquished.

To the credit of this generation of labor leaders, let it be said that they are as aware as anyone that they occupy a critical place in American society, and make decisions which greatly affect the public interest, and that their methods will have to be appropriate to that kind of a responsibility. And they know that this situation, as much as the management stimulated public police power, is forcing them to revise old and devise new methods. They know that their growth in size and influence, the legal status they now enjoy, the provision of public instruments like the representation election and the unfair labor practice procedure, the necessity for winning public approval have made it necessary and desirable for them to take a cold and critical look at some of these methods. In the light of their newness to the job, they have depended to a surprising degree on the instruments of peaceful organization and negotiation.

But, as in the case of management, it would be surprising if they didn't fight to prevent any curtailment of their right to use traditional methods and assess such curtailment as a loss of power. Unions have their own version of managerial-prerogative action. They resist modification of what they claim as a right to picket, to strike, to boycott,

to enforce the use of union made materials, and to compel union membership by union shop agreements in place of the old-fashioned methods either of evangelical persuasion or coercive pressure.

And when they see the management people they deal with supporting legislation to restrict them in these methods which they look on as union prerogatives, it is at least understandable that they consider this to be evidence that management would like to cut them down to size. And I don't think any management man would deny that that *is* their objective. Both union and management leaders reflect the mood of Colonel Blimp, Mr. Lowe's cartoon character representing the average John Bullish Englishman who reacted to the postwar "breaking up" of the power and possessions of the British Empire in these words, "I'm against it. As for me, I'm for holding on to all we've got—if we can get it back."

I still believe that in time management will see that the path to their power lies in developing the methods and skills appropriate to the virtual situation of co-managership that they face. I still believe that in time union leaders will see that their path to power lies in developing the methods and skills appropriate to the virtual situation of co-responsibility they face for keeping a delicate and complicated job- and product-providing industry in efficient operation. I still believe that when that day arrives, both will wonder why they interpreted the necessity to develop new methods for gaining and using power as a *loss* of power. But in the meantime that interpretation and the suspicion that the other party, in attempting to restrict their reliance on traditional methods, is trying to cut them down to size emphasizes the word antagonistic in the pattern of antagonistic cooperation which now describes their relationships.

Two more ways of thinking about power have contributed to an increase in antagonistic elements in union-management relations. The first is the confusion of corruption and power, the second is the identification of union size with power. Management people are not necessarily the ones who created the confusion nor invented the identification. But enough of them have joined in the discussion to give union leaders the impression that they unconsciously or intentionally contribute to such ideas and are ready to use them at the drop of a hat, if to do so would reduce the effectiveness of the pressures unions are now able to bring on management.

There are obvious relations between power and corruption and between power and size. They are too complicated to discuss here. My point is that the simple grouping of these concepts as practically

identical with each other and the use of evidence of one to demonstrate the existence of the others has kept the discussion of such matters on a pretty low level where antagonistic emotions have a good chance to germinate.

But now let's turn from the way the parties think about power to the methods they've used to increase their power. It is taken for granted that any use of force or violence will contribute to the hardening of antagonisms between management and labor leaders. But two other methods increasingly used during these twelve years have had the same result. I refer to certain kinds of political and legal action and the extension of alliances.

Political and legal action has this effect because it throws issues into an arena where they have to be simply and dogmatically stated in terms that will get a desired response from people who really don't know what the issues are all about. And I'm talking now not just about citizens in an election or referendum, but about the majority of legislators, and even some of the judges and servants of administrative agencies. If you want to influence people in that kind of a situation, partisan positions have to be taken and held firmly, and once and for all. Also they are likely to be linked up with high sounding principles so that unwillingness to desert those principles becomes a matter of honor. And once the issue is laid down, there is nothing to do but fight on to victory or defeat. You don't change your platform in the middle of a campaign nor your case before administrative agency or court before the judgment is given.

I expressed a faith that the power relations on the *collective bargaining front* would eventually move away from their present hardening antagonistic pattern. One of the reasons for that faith was that the dealings between parties at the bargaining table are immediate and direct, and the ideas and methods used are subject to immediate testing and correction.

But the antagonistic relations developed between opponents in the attempt to obtain legal immunities and impose legal restrictions of a general sort don't have a chance to get resolved by the give and take of face-to-face negotiation and other kinds of practical dealings with one another.

Notice I'm not talking about *all* kinds of political and government agency action. I'm talking about efforts to gain advantages in collective bargaining through obtaining the partisan assistance of government. Even that kind, of course, may be necessary. If so, we must accept the consequences. To the degree that the struggle for increas-

ing one's own power position and cutting the other's power position down to size takes place in the area of legislative, administrative agency, and court determinations instead of in the area of collective bargaining, we may expect a continued hardening of the antagonisms. Don't misunderstand this as a case against political action. I'm just pointing out cause and effect. I give you just one example. Is there any doubt that the campaign for right-to-work laws has created more lasting hardened antagonisms than the whole series of attempts to get the union shop and to avoid it through collective bargaining?

Another method which is natural and inevitable, but which has contributed to this result is the way both parties have widened their alliances in order to gain advantages in dealing with each other. This does not necessarily mean that multiple-company bargaining has shown any marked increase except perhaps on the West Coast. But the lending of formal and informal strike aid, the informal agreements to stick together, the mapping of common strategy and policy in negotiations does seem to be on the increase. This has, of course, long been a union approach, increasing unit power by making alliances for mutual aid and support and action. Now management appears to be stepping up such an approach, for instance, in air transport, trucking, shipping, newspapers, and possibly in autos and steel. Notice that alliances are normally intended to support a party in antagonistic relations.

The broadening out of alliances leads to the hardening of whatever pattern of relationship exists if for no other reason than that the larger the number of units involved, the greater the need to stabilize the kinds of strategies and tactics to be used and the philosophies that legitimize the actions. People and organizations engaged in joint supportive action must know what to expect from each other and that makes adjustment in methods and principles less likely.

The final factor which has tended to harden some of the antagonistic elements in the relationship between management and labor is one which will be with us to the end. The contacts which leaders in both groups have with each other tend inevitably to focus on points of disagreement between them. And those disagreements are honest and deep-seated ones over objectives and ideas of how to reach them held by people who manage and people who are managed, held by people who have to meet a payroll and those whose livelihood depends on being on that payroll. Such disagreements can be reduced or compromised but not removed. To be sure, the whole process of negotiating the trade agreement and the whole process of grievance settle-

ment is an attempt to reduce disagreements. But that doesn't change the fact that the subject matter dealt with in the relationship is normally a disagreement. That's no one's fault. It's the basic reason we have collective bargaining. But negative and antagonistic reactions and feelings are likely to be sharpened up with practice in that kind of a situation.

Twelve years ago I thought I saw a tendency for union leaders and managements in some quarters to tackle together problems on which there was no necessary disagreement between them. I thought this might reduce some of the antagonism built up in fighting over necessary and legitimate disagreements. There are examples of this but not enough to set the general tone of the relationship. We can still report, however, that responsible spokesmen on both sides are asking such questions as the following :

"Is there any inevitable reason why there should be a conflict between a management and a union position on such matters as: cost and waste reduction, safety promotion, technological improvement, automation, training programs, the improvement of standards and administration of unemployment insurance, workmen's compensation, health insurance?"

"Is there any reason why joint discussions shouldn't be undertaken to clarify objectives, analyze facts, and even why common action shouldn't be taken with respect to *such* matters as well as with respect to such larger issues as maintenance of full employment, control of inflationary forces, rehabilitation of depressed areas?"

I am aware that there are objections on both sides to joint activity on many such issues, particularly those involved in planning for and operating plants. Handling some of them would require, for instance, a sharing with union people of figures which most management thinks can't be disclosed that way. Many managers object that any such move would be an abdication of functions that should be exclusively their responsibility. Union leaders in many cases are also careful about getting involved in joint action, the results of which they might wish later to challenge as disadvantageous to their members. They don't want to be charged with playing footsie with management. Anyone familiar with developments over the past 12 years knows how many times some such moves have been suggested from both sides and how frequently they have foundered on just such craggy rocks as these.

But this serves only to point up the situation I'm discussing here. Parties whose relations are chiefly over disagreements find their

antagonisms rather than their cooperative tendencies fed by their contacts. And because that has been the kind of contacts most management and labor leaders have had with each other, their antagonistic predispositions have had at least as much practice and probably more than the cooperative predispositions.

IN CONCLUSION

Twelve years of experience in dealing with each other leaves the basic situation of antagonistic cooperation pretty much unchanged. And unless our experience is different from any other industrial nation, I suspect it will continue that way. And in itself that is nothing to be worried about. Antagonistic cooperation has characterized a great share of the adjustments between forces both in nature and society.

When two groups of people have to resolve very fundamental differences of objective and method on the operational level, antagonistic cooperation is what should be expected. And whatever *ultimate* common goals may be in terms of a healthy economy, and a healthy, capable, and public spirited citizenry, there are *on the operational level*, real and honest immediate differences and disagreements between the people who work and the people they work for.

I have pointed out today some of the circumstances that at the moment have pushed that antagonistic cooperation toward the antagonistic end of the scale. The consequence I regret, however, is not the degree of antagonism, but the *hardening* of those antagonisms in a way that makes adjustive and adaptive cooperation more difficult in the face of a dynamic changing economy that will challenge all the capacity for adjustment and cooperation both management and labor can muster. But cooperation there *has* been and cooperation there *must* be, simply because the companies who employ the workers and the unions who bargain for the workers need each other.

The unions need the cooperation of management. They need all the skill and power management can muster to provide the plans and resources and organization of effort that add up to expanding job opportunities and products, the amount and quality of which necessarily determine the economic and even social status of their members. The unions need management if for no other reason than to have someone to bargain with.

And whether they admit it or not, the management of those companies need the cooperation of unions. They need the unions to bring

to a focus on their decision-making the needs of and pressures from the workers they employ. It is a mistaken notion that the unions *created* those needs and pressures. They were always there—but in major sectors of industrial operations they did not find, and do not now find, adequate and effective expression except through the services of a union.

Antagonistic cooperation will continue to swing back and forth between the poles of antagonism and cooperation, but management and union leaders are locked together in a joint enterprise in which neither can do without the other. Too much antagonism is self defeating. A hardening of antagonisms is crippling to adaptive effort. But I would also venture to say that too much cooperation, at least some kinds of cooperation, is self defeating. It is not to the benefit of the members of unions if management cooperates by rolling over and does not do its best to watch its costs, maintain systematic and orderly organization, the right to make necessary decisions, and to allocate the proceeds of production to the continued improvement of the instruments of production, including both men and machines. And it is not to the benefit of management if the union leaders become so much a cooperative arm of management that they lose their power to present forcefully and effectively the needs and demands of workers for an increasing standard of living and an increasing voice in making the rules and controlling the conditions under which they work and live.

If each does that job well, he is cooperating with the other party, whether that party gives him credit for it or not.

Part II

**CRUCIAL PROBLEMS POSED BY
AUTOMATION**

AUTOMATION IN MANUFACTURING

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"It is a great mistake to think that in the past the full sweep of a new invention has ever been anticipated at its first introduction. It is not so even at the present day, when we are all trained to meditate on the possibilities of new ideas."

—Alfred North Whitehead, in *The Aims of Education*

It was only ten years ago that the word, "automation," first appeared in print.¹ Few new words have stimulated as much discussion and controversy in as short a time. The pessimists have argued that the kind of automatic machinery to which the term applies will enslave mankind and produce a cataclysmic depression. The optimists have viewed automation as the key to Utopian abundance and leisure. Skeptics have denied that there is any distinguishable phenomenon which justifies the addition of a new word to the language. The IRRA session on automation which was held four years ago today² was a major contribution toward clarification of concepts, deflation of the more fantastic speculation, and delineation of problem areas. Today's session assumes—correctly, I trust—that the developments and the research of the intervening years have made possible another step forward in our understanding of automation.

CONCEPT AND DEFINITION

There have been many definitions of automation. To some people, this new word is merely a synonym for technological change; others consider it a synonym for mechanization. Still others would give it a much narrower meaning.³ Part of the problem of definition arises out of the fact that we are considering a whole family of technological developments, each with a multitude of applications. Some definitions merely describe one or more members of the family, and some relate to one or more types of application.

¹ Rupert LeGrand, "Ford Handles by Automation," *American Machinist*, a McGraw-Hill trade journal (October 21, 1948), pp. 107-122. The word was apparently coined by D. S. Harder of Ford Motor Company in 1946.

² Industrial Relations Research Association, *Proceedings of Seventh Annual Meeting*, 1954, Part V, "Automation, Productivity and Industrial Relations."

³ J. R. Bright, in *Automation and Management* (Boston: 1958), Appendix I, has collected the definitions of automation presented by 24 witnesses before the Congressional hearings on automation in 1955. Academic writings and technical journals yield additional definitions.

In view of this confusion, a speaker on automation must tell his audience what meaning he assigns to the term. My definition of automation is as follows: "mechanization which emphasizes automatic control; also, mechanization of computation, data-processing, and record-keeping." The first part of this compound definition refers particularly to factory automation, the latter part especially to office automation—but it should be emphasized that the two are certainly not unrelated. Automatic computation and data-processing play an important role in the more complex forms of factory automation. The wording of my definition is intended to imply that automation, especially factory automation, is a matter of degree rather than an absolute. Any machine involves some control of motion.⁴ The machine with a very low degree of automation—for example, a power saw—is highly dependent on human control, in addition to its own control of motion, in order to perform its function. With the highest degree of automation, as in a guided missile, the machine in operation displaces human control completely; it can even anticipate required action and adjust its performance accordingly.⁵ Automation should be considered a component of mechanization, and a highly variable one.⁶

Thus, it is technically correct to say—as many people have—that automation is nothing new. It is as old as mechanization itself. Furthermore, isolated examples of relatively advanced applications of automation can be found far back in history.⁷ Some industries⁸

⁴ See the interesting discussion of this point by Abbott Payson Usher, *A History of Mechanical Inventions* rev. ed., (Cambridge: 1954) p. 116.

⁵ Compare Bright's interesting and useful analysis of 17 "levels of mechanization" (op. cit., pp. 39-49). Some of his distinctions between "levels" appear to be questionable (as he recognizes), and his definition of automation is different from mine; but he seems at least by implication to make the degree of mechanical (as opposed to human) control the main distinguishing factor between lower and higher levels of mechanization.

⁶ Some writers make transfer machines and/or the integration of previously separate operations either a distinctive form of automation or the only thing to which the term should be applied. I believe that transfer machines and other types of integration are results made possible by automatic control systems. Sometimes the automatic control is achieved by mechanical linkages rather than electronic devices; but the means is obviously less important than the nature of the change achieved, and my definition attempts to focus on the latter.

⁷ The Romans used a water device for automatic control of temple doors. Jacquard used punched cards to control needle selection in his loom in the early eighteenth century. In 1784, Evans designed and built a fully automatic grist mill. In more recent times, the A. O. Smith Corporation had a highly automatic frame plant in operation in 1920; the Morris Automobile plant in England was using a transfer machine in 1924; and in this country Graham-Paige was using transfer devices between machines in 1929.

⁸ For example, petroleum refining, chemicals, paper-making, ore refining, telephones, and cigarette manufacture.

were rather highly automated before the word was invented. But these facts should not be permitted to obscure the more important fact that in the last decade advances in automation have been very great. World War II greatly stimulated the development of complex control devices for military application. Since the war, unprecedented amounts of resources have been devoted to the development and application of such technology throughout industry. The result has been a marked increase in the degree of automation in a tremendous variety of operations. Automation is not new, but unquestionably it has acquired a new importance.

The common statement that we are now "on the threshold of a new industrial revolution" probably contributes more to apprehension than to enlightenment. Quantitative measurement of the growth of automation is extremely difficult or perhaps even impossible. There are many indications, however, which suggest that the growth rate of this component of mechanization is accelerating.

A recent McGraw-Hill survey⁹ of investment plans of metal-working firms for 1958 showed that, in the sample of firms surveyed, nearly 30 per cent of all expenditures for tools and other production equipment were earmarked for "automation"; those firms already having "some automation" planned to spend 40 per cent of their equipment funds for more automated machinery; and in the automobile industry, nearly 60 per cent of the funds were to go for automation.

Only a few years ago, inspection and assembly were among the types of operations that were considered extremely difficult to render automatic. Today, in the production of automobile engines a very large proportion of inspection is done automatically and some of the assembly is automatic.¹⁰ In the electronics industry, a machine which automatically assembles components is in use.¹¹ Much progress has been made in automatic assembly in other industries as well.¹²

⁹ *American Machinist* (October 21, 1957), p. 179. A statistician could undoubtedly raise many objections to these figures, but they probably give some rough indication of the magnitude of the shift to higher levels of automation in metal working. This publication rather narrowly defines automation as "continuous automatic production."

¹⁰ Gilbert G. Murie of Ford Motor Company, quoted in *American Machinist* (November 18, 1957), p. 141. See also "Taking Worry Out of Automation," *Business Week* (August 23, 1958), pp. 44-46.

¹¹ This machine, called the "Autofab," is described by Cleo Brunetti of General Mills in *Hearings on Automation and Technological Change*, Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report, Congress of the U. S., 84th Congress, First Session, 1955 (hereafter cited as "*Hearings*"), pp. 373-374.

¹² G. H. DeGroat, "Automatic Assembly," *American Machinist* (September 10, 1956), pp. 129-148.

At the IRRA session four years ago, Baldwin and Shultz made brief reference to an automatic, tape-controlled milling machine which then was a unique laboratory prototype at MIT.¹³ Today, several hundred machine tools utilizing the principle of numerical control are actually on production floors, and dozens of manufacturers are offering them for sale. The reports on the capabilities of these machines are startling. A comparison run on a standard aircraft test part showed a total of 104.6 hours of work from blueprint to finished part by conventional methods, against 3.5 hours by use of numerical control methods. One aircraft manufacturer reports average time savings of about 80 per cent. On simpler metal-working operations the comparison is less spectacular, but still the advantages are sufficient for a trade journal to predict rapid and widescale adoption of numerical control of machine tools.¹⁴ Application of this principle to transfer machines and to automatic assembly is technically feasible, and would tremendously increase the flexibility of automatic production lines, particularly for short runs.

Factory automation has become world-wide. Although a high degree of automation is not widespread in Europe, some plants there are at least as advanced as the most modern American plants.¹⁵ The Soviet Union is known to have in operation several highly automated plants. One of these is a ballbearing factory where the product is processed from raw stock to sealed and labelled carton without being touched by human hands.¹⁶ One of the many advanced machine tools on display in the Soviet pavilion at Brussels last summer was a giant numerically-controlled reaming and boring machine.¹⁷ The Sixth Five-Year Plan lays heavy emphasis on the development and extension of highly-automated production methods throughout Soviet industry. A Ministry of Instruments and Auto-

¹³ George B. Baldwin and George P. Shultz, "Automation: A New Dimension to Old Problems." IRRA *Proceedings* (1954), p. 116.

¹⁴ W. M. Stocker, Jr., "The Production Man's Guide to Numerical Control," *American Machinist* (July 15, 1957), pp. 133-154; H. E. Aukemy and D. H. Bingham, Jr., "Production-Proved Numerical Control," *ibid.*, (November 4, 1957), pp. 145-156.

¹⁵ I inspected some of these plants in the summer of 1958, and my impressions have been confirmed by industry people in this country who are better qualified than I to judge the level of automation.

¹⁶ Peter Trippe, "Russia's Automatic Factory," *American Machinist* (January 14, 1957), pp. 147-154.

¹⁷ Personal observation. See also "Russian Tools at the Brussels Fair," *American Machinist* (June 2, 1958), pp. 92-93; and the series entitled "Report on Russia," *ibid.* (November 19, 1956, December 3, 1956, December 17, 1956, and January 14, 1957).

mation was recently established.¹⁸ All of man's ventures into outer space represent (among other things) exploration of the frontiers of automation, and the Sputniks demonstrate that the Soviet scientists are at least abreast of us in their mastery of the most advanced automatic control techniques.

Thus we see that the new control and computing techniques that have been developed in recent years are now in use in many sectors of manufacturing. Familiarity with the basic concepts and the "hardware" is growing. New and significant applications of these control techniques are just becoming available. International competition is adding to the domestic competition which often compels the adoption of automatic methods. These are factors stimulating the growth of automation.

On the other hand, there are some inherent limitations, both technical and economic, on the growth rate. The capacity of our machine tool industry is limited, the equipment funds of business are also limited, capable engineers and technicians are in short supply,¹⁹ and the tremendous investment in conventional machinery may tend to slow the adoption of the more efficient methods that become available. A "tidal wave" of automation seems unlikely. On balance, however, it seems reasonable to make the basic assumption that automation will help to make the rate of technological change in manufacturing appreciably more rapid than the average of the past century. The testing of this assumption is not an easy task, but there are reasons for assigning it a high priority in economic research. Change which comes slowly is less likely to create serious problems than rapid change. Knowledge of the likely rate of change would help us to see the scope of the problems which are now only dimly perceived.

I turn now from the rate of change to the nature of the changes wrought by the growth of automation in manufacturing. Before proceeding, two caveats are necessary. Part of the ensuing discussion is based on a number of recent case studies. The coverage of these studies is far too limited to justify broad generalizations about a subject as complex as automation. The studies do serve, however, to cast doubt on some of the assertions so confidently made in speculative literature, and they suggest hypotheses which

¹⁸ "Automation: A Brief Survey of Recent Developments," *International Labour Review* (October, 1956), pp. 384-403 at 401. The Plan was later revised, but the emphasis on automation was unchanged.

¹⁹ However, engineering time required on complex design problems is substantially reduced in some cases by use of the new electronic computers.

would be fruitful to test further. Another part of my discussion refers to broad trends in manufacturing and in the economy as a whole. Obviously, automation is only one of the factors producing these trends, and isolation of the unique influence of automation is extremely difficult. But for many purposes, quantitative measurement of the contribution of automation is not essential. What is important is that we can be reasonably sure that automation will accentuate the observed trends.

EMPLOYMENT EFFECTS

Foremost among the crucial questions posed by automation is, what effect will it have on employment? This concern is the natural result of reports concerning the tremendous labor-saving capabilities of virtually all types of automation, especially in manufacturing. Almost by definition, automation is labor-saving. The chief, and almost universal, reason for installing automation equipment is to save on direct labor costs. Savings of 75 to 95 per cent of the manpower on particular operations are not unusual. Union leaders have made this fact the basis for a great array of bargaining demands and political programs, ranging from a shorter work-week to conservation of natural resources. A great many company representatives have reacted defensively—by denying that automation represents anything new or important, by being secretive about the results achieved by automation, by refusing to cooperate with academic and governmental researchers, or by emphasizing the great job-creating ability of technological change.²⁰ The aura of controversy which has thus developed, and the special pleading which it has engendered, have undoubtedly impeded the growth of knowledge about the employment effects of automation.

Economists have written much on the general subject of technological change and employment.²¹ The most commonly-held

²⁰ The Congressional *Hearings* (cited above, footnote 11) provide many classic statements of both positions.

²¹ For good summaries, see Alexander Gourvitch, *Survey of Economic Theory on Technological Change and Employment*, WPA National Research Project, Report No. G-6, (Philadelphia: May 1940); Lewis L. Lorwin and John M. Blair, *Technology in Our Economy*, TNEC Monograph No. 22 (Washington: 1941). Some of the more recent literature is listed in Gloria Cheek, *Economic and Social Implications of Automation: A Bibliographic Review* (East Lansing: 1958); and *Automatic Technology and Its Implications: A Selected Annotated Bibliography*, U. S. Department of Labor, Bureau of Labor Statistics Bulletin No. 1198 (Washington: 1956). See also Yale Brozen, "The Economics of Automation," *American Economic Review* (May, 1957), pp. 339-350.

opinion appears to be that technological displacement is only a transitional problem; improved productivity in one sector of the economy results in compensating increases in demand, possibly in the affected sector, and if not there surely in other sectors. We should perhaps reexamine some of the assumptions on which this analysis rests; but such a reexamination would carry me far beyond the limits of my subject today. I would like to make two observations: the first is that nothing in recent experience in this and other countries suggests that it is impossible to maintain a fairly high level of employment (with only mild cyclical fluctuations) even with a rising rate of productivity growth. Second, experience does suggest that automation may contribute to some particularly difficult localized unemployment problems.

Most of the case studies of the effects of factory automation have at least touched on the employment effects.²² Their findings relate to the short run and to the plant or company studied. There is considerable agreement that there have usually been substantial reductions in manpower requirements per unit of output, but that jobs have almost always been found elsewhere in the plant for those displaced on the particular operation. If a reduction of total employment in the plant was necessary, new hiring was curtailed so that normal attrition accomplished the adjustment. In some plants, total employment increased somewhat (despite internal displacements) where there was a sharply rising demand for the product. In short, companies seem to have learned, and to have found it possible to act upon the knowledge, that resistance to automation is lessened if nobody in the company loses his job because of it.²³

This picture changes when we lengthen the time dimension and shift to the industry or broader category. (To be sure, additional factors also enter the picture.) It appears that permanent reductions in force due to automation (and presumably other changes)

²² Thirteen case studies are presented in Bright, *op. cit.*; see also Charles R. Walker, *Toward the Automatic Factory* (New Haven: 1957); W. H. Scott, A. H. Halsey, J. A. Banks, and T. Lupton, *Technical Change and Industrial Relations* (Liverpool: 1956); Floyd C. Mann and L. Richard Hoffman, "Individual and Organizational Correlates of Automation," *Journal of Social Issues*, Vol. 12, (1956), pp. 7-17; Department of Scientific and Industrial Research, *Automation* (London: 1956); Geoffrey A. Cass, "Automation and Job Security," *Automation and Automation Equipment News* (November, 1956); and three Bureau of Labor Statistics Studies of Automatic Technology in manufacturing—an electronics company (reprinted in *Hearings*, pp. 279-90), a large mechanized bakery (Report No. 109, September, 1956), and a petroleum refinery (Report No. 120, 1957). Two other BLS studies in this series relate to office automation.

²³ No doubt union pressure and seniority rules had some effect in unionized companies.

are sometimes postponed by companies until an economic downturn makes large layoffs necessary; then, in the recovery period, fewer workers are recalled than were laid off.²⁴ Expansion of sales (and employment) by an automated plant may be at the expense of other plants in the same industry or even in the same company.²⁵ Obviously, unless the demand for an industry's products expands at least as rapidly as productivity improves, employment in the industry must decline.

To be sure, changes in employment opportunities in particular sectors of the economy are nothing new. To cite the most familiar example, agriculture once absorbed 75 per cent of our labor force and today absorbs only 10 per cent. In recent years, there has been a decline in the absolute number of farmers and farm laborers. This basic change in the structure of our economy was accomplished without any major upheavals, although we do have a chronic "farm problem." Some of those who recognize that automation and other technological changes are affecting the structure of manufacturing employment have argued that the changes will be of modest proportions; that jobs lost in some industries will be replaced by jobs in other sectors of manufacturing, particularly those building new equipment and those turning out completely new products. There is now reason to doubt the validity of this argument. The percentage of the labor force finding employment as *production workers* in manufacturing has been declining. From 1947 to 1957, such employment increased by only one per cent; and from 1955 to 1957, there was an absolute decrease in the number of production workers in manufacturing, although output increased by three per cent.²⁶ Automation is unquestionably an important contributing factor to this shrinkage of production worker jobs in manufacturing; and if it is true that the growth of automation is accelerating, its effect on employment in manufacturing may be

²⁴ Some supporting statistics are presented in "Labor," *Fortune* (November, 1958), pp. 241-242.

²⁵ An important effect of automation is to make it profitable, in many cases, to build completely new plants which are designed to make the best use of the new equipment. Hence, automation tends to increase the geographical mobility of industry.

²⁶ Murray Wernick, "Occupational Shifts in Manufacturing Employment: Some Implications for Productivity and Unit Labor Cost Measurements," unpublished paper presented to the Business Statistics Section of the Cleveland Chapter, American Statistical Association, March 4, 1958. Mr. Wernick is an economist on the staff of the Board of Governors of the Federal Reserve System.

expected to increase. Office automation will affect the employment of non-production workers. Not only many workers presently employed in manufacturing, but also new entrants into the labor force, must find jobs in other sectors of the economy.

If workers were highly mobile and had good knowledge of job opportunities, such fundamental shifts might be accomplished without great difficulties. But in our imperfect world the decline of manufacturing employment creates acute problems in those geographical areas which have been concentration points for the industries most affected. Michigan, for example, has had a serious unemployment problem for several years; and even assuming a substantial recovery in automobile sales in 1959 and 1960, unemployment is expected to remain at the extremely high level of 10 to 12 per cent of the labor force. It must be conceded that automation is not the sole cause of Michigan's problem; but there can be no doubt that its effect is significant. Of course, Michigan is not unique in this regard.

We have reason to hope that we now have the weapons to combat *general* depressions; but the experience of recent years shows that we can have persistent local depressions in the midst of a high level of national prosperity. Our remedial measures for severe local or regional unemployment appear to be quite inadequate. Privately-bargained "shock absorbers" like severance pay, supplementary unemployment benefits, company retraining programs, and area-wide seniority can be very helpful in individual cases, as can public unemployment compensation; but they do not alleviate hard-core unemployment. One major obstacle to progress in meeting this problem is the common tendency to regard it as local and transitional, and therefore not really requiring remedial action—at least, not at the national level. In a period of accelerating change, such an attitude must be reexamined.²⁷

EFFECTS ON JOB REQUIREMENTS AND OCCUPATIONAL STRUCTURE

In the past, major technological changes have profoundly affected the existing structure of skills and occupations.²⁸ The speculative

²⁷ For an instructive critique of our approach to this problem, and a comparison of the more successful British approach, see W. H. Miernyk, "British and American Approaches to Structural Unemployment," *Industrial and Labor Relations Review* (October, 1958), pp. 3-19.

²⁸ For an interesting analysis of this point, see Georges Friedmann, *Industrial Society* (Glencoe, Ill.: 1955), especially Part Two.

literature on automation has emphasized the likelihood of great changes from this newly important aspect of technology. But there has been much disagreement regarding the nature of the changes to be expected. Some writers foresee "the greatest upgrading of the labor force we have ever seen."²⁰ Others have contended that automation may lower skill requirements in a majority of cases, at least for operators.³⁰ It has been commonly assumed that both the number and complexity of maintenance jobs would be substantially increased by automation.

Let us consider some of the findings of empirical research on this point. A McGraw-Hill survey of a sample of metal-working firms which had had experience with automation (narrowly defined) showed that only 27 per cent of the firms felt that machine operators needed more skill on automated equipment than on the old equipment; 30 per cent reported no change in skill requirements; and 43 per cent felt that the new operation required *less* skill.³¹ A number of case studies appear to support the conclusion suggested by these figures. Moreover, many new plants with a great deal of automation have hired inexperienced workers as machine operators and have given them only rather limited training. Indeed, it is rather difficult to find many cases in which factory automation *per se* has substantially raised skill requirements for machine operators. Some of the reported increases in skill are actually due to the establishment of combination jobs which require operators to perform duties such as set-up and some types of maintenance which were previously assigned to separate classifications. In some instances, job rotation has raised skill requirements above what they would otherwise have been. The monotony, machine-pacing, and heavy physical demands characteristic of some jobs in mass production tend to be alleviated by automation; but where (because of technical or economic considerations) some manual operations remain interspersed between highly automated operations, the demands of the former may be greatly intensified. In general—and with some exceptions—automation appears to have improved general working conditions by making the workplace safer, quieter, and cleaner. In some situations, shift work has been increased by automation.

²⁰ Peter F. Drucker, "Integration of People and Planning," *Harvard Business Review* (November-December, 1955), p. 38.

³⁰ J. R. Bright, "Thinking Ahead: Some Effects of Automation," *ibid.*, p. 32.

³¹ Again, it would be a mistake to place too much reliance on these figures; but the relative magnitudes probably have some significance. The figures were published in *American Machinist* (October 21, 1957).

Other job characteristics seem to result from the higher levels of automation.³² The "operator" frequently becomes a "machine monitor." This means that he must constantly be alert; yet the need for action may arise only infrequently. The resulting perceptual fatigue may pose some new work design and training problems.³³ "Job enlargement" has been a commonly expected result of automation; but there is little empirical evidence that such a result has evolved. The machinery is more complicated, a particular operator's assignment may cover a greater variety of machine operations, and he may get an added sense of importance from being assigned a degree of responsibility for complex and expensive machinery. But merely pushing buttons and watching for warning lights is unlikely to have intrinsic interest and challenge for very long.

A number of researchers have been interested in the effects of automation on the social structure of the plant. Their findings suggest that automation may tend to reduce the interaction among workers both by reducing their numbers and by increasing their spatial separation in the plant. Their interaction with supervision may be increased. Both of these changes may be sources of discontent. Typically, the foreman seems to have somewhat fewer workers under his jurisdiction on automated installations than on conventional ones. Whether or not the importance of teamwork among production workers is increased appears to vary considerably depending on the form of technology utilized. Some of the more highly developed automatic control systems appear to displace human teamwork to a substantial degree. The greater integration of operations which seems to be a common result of automation tends to increase the foreman's contacts both with his peers and with those above him in the management hierarchy. There are indications that automation may compel some other significant changes in management structure, but little research has been done on this point.

Most of the evidence thus far seems to indicate that the size of the maintenance force is not increased by automation in the majority of cases, at least not after the "debugging" period. Increased skill requirements seem to be notable only in the case of

³² In addition to the items cited in footnote 22 above, see W. A. Faunce, "Automation and the Automobile Worker," *Social Problems* (Summer 1958), pp. 68-78; also his article, "Automation in the Automobile Industry," *American Sociological Review* (August 1958), pp. 401-407.

³³ N. H. Mackworth, "Work Design and Training for Future Industrial Skills," Sir Alfred Herbert Paper, delivered before Institution of Production Engineers, published in *The Engineer* (London), Vol 201 (1956), pp. 221 and 231.

electrical and electronic maintenance.³⁴ Some companies have found it desirable to combine the duties of several of the traditional maintenance crafts. Finally, it should be noted that some progress has been made in simplifying—even automating—maintenance work. We seem to have had considerable success in developing what Vannevar Bush calls “reliable complexity.”³⁵

Some attention should be given to the effects of factory automation on skilled, non-maintenance crafts—the tool and die groups, the pattern and template makers and allied workers. There have been predictions of serious shortages in this category in the years ahead. Let me merely observe that numerical control of metal-working machinery achieves some of its most spectacular savings by eliminating the use of patterns, templates, and similar intermediate steps between blueprint and actual machining. It would be decidedly premature to predict wholesale displacement of the highly skilled craftsmen who work in those intermediate stages; but we must begin to turn a questioning ear to the predictions of future shortages in these fields. We must also reserve judgement on the assumption that a relative decline in machine operators will automatically result in a larger proportion of skilled workers in the “job mix” in manufacturing.

We should consider whether one of the fundamental effects of automation is to relocate and transmute some of the skills and knowledge required for industrial production. To conceive and design the control systems and the “hardware” which displace human control in the workplace requires the application of scientific and engineering knowledge in laboratories and drafting rooms. The growth of automation has been accompanied by a rapid expansion in the employment of scientists and engineers. One general measure of this trend is the increase in research expenditures, which doubled between 1953 and 1957, to a level of 7.0 billion dollars.³⁶ More specifically, the number of “professional, technical and kindred workers” employed in manufacturing increased by 45 per cent from

³⁴ A majority of the speakers at a 1955 conference of the Institution of Production Engineers mentioned this problem. *The Automatic Factory—What Does It Mean?* (London: 1955). In addition, several case studies support this statement.

³⁵ *Hearings*, p. 610.

³⁶ Wernick, *op. cit.* (see footnote 26).

1952 to 1957 and by 27 per cent from 1955 to 1957.³⁷ Professional workers in 1957 constituted 27 per cent of all non-production workers in manufacturing.

Once again, these are developments which cannot be attributed solely to automation; but automation was undoubtedly one of the important causal factors. We must keep these trends in mind in evaluating the efficacy of "retraining programs" as a remedy for displacement. It hardly seems feasible to "retrain" machine operators or even machinists as physicists or engineers. Retraining can be useful only to the extent that the new skills can be learned in a relatively short time, and to the extent that they increase employability. Some of the new jobs created on factory production lines by automation can be filled by retrained workers. But the prospective changes in occupational structure in manufacturing industry seem likely to require the redeployment of a portion of the present force of production workers and many new workers into the other segments of the economy, such as service and distribution, rather than massive retraining for other factory jobs.

EFFECTS ON LABOR-MANAGEMENT RELATIONS

Two other speakers on this morning's program will deal with some of the specific problems in labor-management relations growing out of automation. I will confine myself to brief mention of some of the implications for labor and management of what I have said here. The increase in the number of non-production workers and the decline—both relative and absolute—in production workers in manufacturing will significantly affect union membership, unless the unions are able to organize many more white-collar workers than in the past. Some increase in labor-management conflict over the scope of the bargaining unit may be expected. For example, should a programmer who displaces a pattern maker be included in or excluded from the unit? Most collective agreements are vague on points like this. New kinds of jobs will probably increase jurisdictional disputes, not only *between* unions, but between groups *within* unions. Basic changes in job content may require fundamental

³⁷ "Important employment gains have also occurred among managerial, clerical, and sales personnel, but the combined gains of these groups have been somewhat smaller than those of professional workers and more in line with the rise in manufacturing output." *Ibid.* (see footnote 26 above). By 1957, non-production workers represented 23 per cent of total employment in manufacturing. During the 1920's and 1930's, the percentage of non-production workers had remained fairly constant, at around 18 to 20 per cent of the total.

revisions of some job evaluation systems (which tend to be rationalizations of the pre-existing wage and job structure).³⁸ As control of work pace passes more and more to the machine, the very basis of many incentive plans will be undermined.

On the basis of experience and research findings to date, there is little reason to think that present patterns of labor-management relations in manufacturing will be seriously disrupted by the growth of automation. Change has been pervasive and persistent in many industries for many years, and labor and management have developed considerable facility in devising solutions for a great variety of problems growing out of change. No doubt there will be some difficult situations growing out of automation, comparable to the current three-way struggle between the airline pilots, the flight engineers, and the airlines over the manning of jet airliners.³⁹ Collective bargaining demands which are pinned to automation, such as a larger share of productivity gains and a shorter work-week, may cause conflict in the future. But thus far, labor and management appear to have been quite skillful in handling the immediate plant-level problems of automation.

CONCLUSION

In this paper I have tried, perhaps without complete success, to resist the temptation to speculate concerning the long-run effects of automation. I have tried to stay close to what we really know or can infer with some assurance. We can now see that automation is likely to have significant social and economic effects. Our certain knowledge about the nature of these effects remains small, despite the good beginning made by the studies summarized here. We now know enough only to doubt some widely held assumptions and to formulate hypotheses which seem worthy of further testing. Throughout history, changing technology has changed man and his institutions. Many great dislocations in the past, like those accompanying

³⁸ Most present systems tend to stress "skill" factors. The steel industry plan stresses "responsibility" factors, and thus far the growth of automatic machinery in that industry seems to have presented no serious problem in job evaluation. This matter is discussed in a forthcoming volume by Jack Stieber entitled *Steel Industry Wage Structure*, to be published as one of the Wertheim Series by Harvard University Press.

³⁹ One important aspect of this struggle is the great increase in advanced automatic control techniques in the jets as compared with propeller-driven aircraft. Another aspect, of course, is the great increase in speed (and therefore productivity) of the new equipment. See "Report of Presidential Emergency Board in re Eastern Airlines, Inc., and Airline Pilots Assn.," July 21, 1958, *Labor Arbitration Reports*, vol. 42, pp. 223-239.

the first industrial revolution, might have been avoided or mitigated if the nature of current changes and their consequences had been better understood. To increase our understanding of automation is an opportunity and an obligation for social scientists.

How should we proceed? Some social scientists appear to have become disillusioned with the case study method. Nevertheless, this method seems especially appropriate for research on some aspects of automation. Automation takes many forms. Its widespread applicability is one reason for its importance. Only by studying a variety of the applications of automation in a number of industries can we answer such questions as whether automation fundamentally reshapes the nature of the human contribution to production. Obviously, such case studies must be carefully designed to test meaningful hypotheses. Case studies must be supplemented by other types of analysis and research. For example, cross-industry studies of changes in skill requirements and other changes in job content would be desirable. In addition, the economic theories concerning the effects of technological change should be tested against our developing knowledge of automation, and against the observed trends in our economy.

There is a great imbalance today between the billions of dollars spent for research on the development and application of new technology and the few thousands of dollars devoted to original research on the social and economic consequences of the new technology. Probably no more than 15 or 20 researchers are devoting a substantial amount of time to the latter kind of study today in the United States, despite the vast amount of speculative literature on the subject. The major foundations, with their enormous influence on the directions taken by research, have given little or no support to studies of automation. Only a tiny fraction of the inadequate budget of the Bureau of Labor Statistics is spent on such studies.

If this imbalance persists, there is a real danger that the social and economic problems of automation will grow far more rapidly than our understanding of them. Even if we assume that automation merely gives "a new dimension to old problems," we should realize that most problems grow old only when we lack the will or the knowledge to solve them.

AUTOMATION: EFFECTS ON LABOR FORCE, SKILLS AND EMPLOYMENT

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Automation has been the subject of many careful studies in recent years. Perhaps no aspect of our industrial society has been so thoroughly probed, discussed and analyzed under such varying circumstances as has automation.

Yet despite this fund of knowledge which has been built up, much of the talk and writing about automation continues to stress unproved or mistaken generalizations, or out-of-context sensational developments. This tendency to rely on speculation instead of fact is especially prone to occur when automation's effect on human behavior is the subject.

MEANING OF AUTOMATION

To guard against this tendency I should like to reiterate that to me automation means something definite and distinguishable from merely improved mechanization or general technological progress. The definition of automation which Messrs. Baldwin and Schultz gave us at the 1954 IRRA meeting remains quite acceptable as it clearly points up the distinguishable aspect of automation to include:

1. The integration of conventionally separate manufacturing operations into lines of continuous production untouched by human hands by means of mechanical engineering techniques.
2. The use of "feed-back" control devices or servo-mechanisms which permit individual operations to be performed, tested and/or inspected, and controlled without human control by means of electrical engineering or electronic techniques.
3. The development of computing machines which can record and store information and perform complex mathematical operations on such information largely by means of electrical engineering developments.¹

Defined in simpler terms, automation means *continuous automatic production*, linking together more than one already mechanized oper-

¹ G. B. Baldwin and G. P. Schultz. "Automation: A New Dimension to Old Problems." *IRRA Proceedings* (1954), pp. 114-128.

ation with the product automatically transferred between two or among several operations. Automation is thus a way of work based upon the concept of production as a continuous flow, rather than processing by intermittent batches of work.

Most of the ideas and equipment that make automation possible have been with us for a long time. If there is anything new about automation, it is the widespread and systematic application of its principles today. Automation is far from being a revolutionary concept. It is the logical and evolutionary outcome of a long trend towards improved manufacturing methods. Originally thought of as pertaining primarily to automatic handling, automation now embraces all the manufacturing operations—making, inspecting, assembling and packaging—as well as handling.

Moreover, automation has spread widely throughout the economy. It started with materials that flow and has made great contributions to the petroleum-refining, chemical, and food industries where flowable materials are involved and the processes are essentially continuous in nature. In these industries, the nature and volume of the product and the necessity for close control of cost and quality made early and extensive automation mandatory.

Today, automation has been extended to non-flowable materials. Under pressure of economic necessity to supply better values to customers, manufacturers have found ingenious ways to make separate items flow through continuous production processes. Pistons and cylinder blocks, condensers and refrigerator doors, and many other parts and products, are processed automatically. Pretzel-bending machines can duplicate the skill of a human hand because buyer preference made it necessary to retain the traditional design of manually tied pretzels. At General Electric's Appliance Park in Louisville, Kentucky, you can watch many parts and segments of appliances being manufactured automatically. And I am sure that you are all familiar with the developments in the automobile industry which have led to much of the speculation about the coming "automatic factory."

Recently automation has been made available to manufacturers in the field of small lot production of many different parts. This development — which we call "flexible automation" — is achieved by equipping individual standard or custom production machines with proved, low-cost electronic controls to automate virtually any production process. Machine "programs"—for operations such as drilling, bending, milling, punching, shearing, turning, boring, or welding —can be quickly and easily set up or modified to produce different

parts. Both preparation and production time can be substantially reduced with big savings in costs and big advances in the values offered customers.

Automation is thus constantly being extended to new horizons as new developments and new costs alter the economics of the present vs. the new method of operations. The manner and speed with which automation will spread depend upon such factors as anticipated design life, the period over which an investment in automation must be amortized, and the cost reduction per unit achievable through automation. As the costs of operating in the traditional manner rise, and more breakthroughs, such as flexible automation, reduce the cost of change, these variables change in favor of automation.

LABOR FORCE AND SKILL EFFECTS

Given the spread of automation in our economy and its probably continued expansion, what will be its effects on the labor force and the composition of that labor force? Some of these effects have been felt already, notably the manner in which automation has contributed to the changing character of the labor force. The fastest growing demand for personnel is the professional and technical fields. The great emphasis today on business research, the underwriting of research by the Defense Department, as well as by private business, and the effects of automation with its increased expenditures for capital investment have all played a part in increasing professional and technical workers by almost 45% between 1947 and 1957.

The expansion of the professional and technical group is one of the most significant elements in the changing character of the labor force since World War II. It is part of the decided shift in manufacturing industries from hourly worker employment into salaried positions. Hourly workers reached their postwar peak in 1953. By 1957, total hourly employees were actually one million less than 1953, and only one percent above the 1947 figure. In contrast the proportion of salaried workers in manufacturing rose from 16 per cent in 1947 to 23 per cent ten years later, and the ratio appears to be going up.²

Two other trends in the labor force deserve mention. One is the steady influx of workers from farm to plant—a trend which antedates World War II. The other is the increasing importance of women in

²Data from U. S. Bureau of Labor Statistics and Federal Reserve Board reproduced in an unpublished paper by Murray Wernick of the Federal Reserve Board.

the labor force. A post World War II development has been the withdrawal of women from work for early marriage and childbirth, and then their return, apparently permanently, after the children start school. I mention these developments because the largest supply of unskilled and semi-skilled labor may well come from these two sources in the future.

Skill Changes. Many of the popular assumptions about the effect of automation on skill appear unsupported by investigation. For example, the literature of automation is replete with enthusiastic generalizations to the effect that automation will upgrade labor by requiring greater skills as well as a more dignified type of work. On the basis of equally unsupported evidence, the more pessimistic see wholesale displacement of labor because existing workers lack the training, capacity or both to perform in an automated factory.

The evidence, however, is that operating skill requirements are more often reduced, or unchanged, by automation *provided* a high degree of technological advancement short of automation has already been achieved. The increase in operating skills is required by the prior change from manual to machine operation, not by a change from machine to automation.³

It now appears that greater maintenance skills may not even be required by automation, with certain significant exceptions. These exceptions pertain to hydraulic and pneumatic repairmen, but most of all to electricians, some of whom must be trained to handle electronic controls. Moreover, the spread of electronic controls increases the need for all around repairmen—machinists qualified to handle and to repair complicated electro-mechanical, pneumatic and hydraulic control systems and servo-mechanisms. The requirement of a sound electronic schooling for machinists has also risen in importance as more and more machine tools are directed and controlled by electronic mechanisms. Job specifications and categories based on this marriage of mechanical and electronic skills will probably become increasingly important during the next decade.

Another interesting effect of automation is the expanding utilization of skilled mechanics as control or dial operators or observers. Although this work may be very inactive compared with the more traditional activity of mechanics it can require a very high degree of

³ See J. R. Bright, *Automation and Management*. Boston Graduate School of Business Administration, Harvard University, 1958, pp. 170-197. The discussion of skill requirements is based on Bright's work.

knowledge, skill and responsibility. The more expenditures a company makes on equipment, the more costly is downtime likely to be. The mechanic who is charged with shutting off equipment which is not working properly, or with getting that equipment back into operation, may be even more of a key employee in the automated factory, depending upon the design and make-up of the job.

JOBS AND ATTITUDES

We have all read about the coming robot plants or offices. Clever public relations men, popular science fiction writers and articulate labor union officials have all conjured up fantastic stories of the plant of the future in which there would be miles and miles of machinery and virtually no workers. Such exaggerations have been a great source of comedy for radio and TV gagsters and a great source of fear for many people who wonder how their skills will fit into this awesome world of the future.

Let me say that I believe that automation will tremendously increase productivity and thus our level of living. It will also change the character of many jobs, particularly in the machine shop trades. But the specter of mass unemployment resulting from automation is patently false. Ever since the first machines were placed in factories there have been those who have regarded improved technology as a great bogey-man, certain to harm the laboring man and, therefore, the great mass of our people unless drastic remedies are hurriedly developed and put into effect. Yet, thanks to our great technology, we are a society in which leisure, education and income are distributed in the most equalitarian manner in history and further advances in well-being are steadily becoming available to an ever-widening number of persons.

Automation promises an accelerated continuation of this trend. Automation has and will create many individual jobs while raising the general level of living. People will be needed to operate and maintain, install and, above all, to manufacture automated machinery.

A serious fallacy of those who look upon automation as a source of unemployment is their failure to consider the jobs which are created by the manufacture and assembly of automated equipment—jobs, incidentally, which do and will continue to require the highest skills and techniques. The huge and intricate machines and the complicated controls which make automation possible are the products of many industries employing many thousands of persons. Consider, for ex-

ample, the new electronic plants and industries built since World War II to supply industry with machinery and controls.

Automation creates jobs also because, by producing more efficiently and at lower cost, the automated plant can increase the market for goods. Society's standard of living can therefore be improved as more jobs are created. The fact that automation, as all technological progress, is basically job creating and not job destroying cannot be reiterated enough. A failure to comprehend this fact can result in the eventual stagnation of our industrial society. Some of the misunderstanding which has been generated over this point results from a failure to distinguish between two distinct, yet corollary types of innovation—*intensive* and *extensive*—and the impact of such innovation through automation on jobs.

All types of innovation result from research and development stimulated by the constant competitive need of industry to reduce costs, to improve methods, and to develop new products and new designs. *Intensive* innovation results from efforts to improve methods, techniques or designs in order to insure a mass market. For example, the development and use of printed circuits is one big reason why General Electric can manufacture better radios in larger quantities at a better price than it did ten years ago.

Extensive innovation on the other hand results in the creation of entirely new products and new uses for products. Examples which come to mind are the transistor and the man-made diamond.

Automated methods and processes are basically examples of intensive innovation in operation. In some instances the use of automated methods results in the substitution of mechanical or electrical devices for human effort. It may also result in the substitution of the work of the engineer, the scientist or the technician for that of the factory or the office worker. But it must result in less input of the factors of production to produce a unit of product. This is axiomatic for otherwise the innovation makes no economic sense. And it further follows, that a unit of product which requires less factor input is cheaper to produce and cheaper to buy. This is the real meaning of productivity gains in a growing economy.

Although intensive innovation is potentially labor displacing, this labor displacement is offset by three factors: the greater volume which cheaper production through intensive automation portends; the fact that new products become economically feasible to produce because of automation through intensive innovation; and the new equipment re-

quired by the greater production or rendering of all equipment obsolete by the new innovated, or automated methods.

Extensive innovation is entirely job creating insofar as the new innovation or product puts an old out of business. Automation spurs extensive innovation (and by so doing creates jobs) because new machinery, materials, controls and facilities must be built to make automation possible. A growth economy is built upon the widespread advance of extensive innovation with its enormous job creating force. And demands for automating equipment are significant and far reaching factors contributing to such extensive innovation, and thus to the growth, progress, and prosperity of our economy and country.

I am, of course, not suggesting that there has not, nor in the future will not, be displacement of individual or groups of workers as a result of the installation of automated equipment. Such displacements have occurred many times in the past and will occur in the future. Several facts, however, should be noted in this regard.

In the first place, such displacement usually would have taken place anyway because a continuation of production by the old methods would render the operation inefficient and noncompetitive. The job loss which results from failure to automate in a competitive economy is greater than any temporary technological unemployment. And, of course, when the company does not automate and loses out to the more alert concerns, it does not contribute to employment through either the purchase of new equipment or through increased productivity.

In the second place, it should be noted that technological displacement of labor in this country has always been small because most technological development occurs in periods of high prosperity. Indeed one of the main reasons why there is prosperity is because of the jobs and income generated by business investment in plant and equipment. When that investment slows down, business conditions drop off. We have had an outstanding example of this investment cycle in this very year, 1958.

Those who have called the current recession the first "automated recession" have given their facts completely upside down. We have a recession primarily because of temporary slowing down of business investments which in turn was caused by various factors, not the least of which has been the effect of the cost-price spiral on sales and on profits.

This sales drop and profit squeeze have made existing and prospective returns to business insufficient in many instances to justify

further investment in expansion and improvement except on a dangerously unrewarding basis. The resulting cutback was a fundamental cause of the current recession—certainly not an “automated recession,” but perhaps it could aptly be termed a recession brought about in large measure by the inability to automate fast enough and effectively enough to arrest or slow the wage-price spiral and the profit squeeze.

A third point to bear in mind in this connection is that much potential technological displacement of labor is avoidable by intelligent planning. The decision to automate is not an overnight brainstorm that can be accomplished the next day. Careful planning, a long wait for delivery and ample opportunity to plan labor integration all combine to permit retraining and normal attrition to take care of much of the problem.

It must also not be forgotten that automation can bring new work to a plant. In order to justify an investment in automated equipment, companies sometimes integrate more fully, doing more processing of raw materials and less sub-contracting out of parts. This adds to jobs in automated factories by increasing the operations covered.

In the great majority of cases, increased production accomplishes the same thing, and, of course, the availability of alternative work in other plants where neither of these are possible is a typical development. In any case, however, careful preparation and education, carried on with due regard for human dignity, can do much both to dispel the false fear of automation in the abstract and to handle the problems created by the introduction of new automation methods when they actually present themselves.

EFFECT ON UNION RELATIONS

The problems which have been discussed here today are certain to have an effect on the union movement and on union relations. If for example the proportion of hourly employees in the labor force continues to decline—that is, if the number and percentage of engineers, scientists, technicians and other salaried employees continue to grow at the same or greater relative rates—unions will represent a smaller proportion of the work force unless their program of white collar unionization can get off the ground. This helps to explain the tremendous interest of the AFL-CIO in unionizing white collar employees. Obviously the future power and prestige of the unions will

be strongly affected by their success or lack of success in a white collar unionization program.

Predictions in this area are of course risky, but so far there is little indication that the appeal of unions to white collar employees has met with a strong response. The average white collar employee has been somewhat loath to follow the leadership of hourly employees. This may certainly change. Any management policies which fail to take into consideration the problems and aspirations of salaried employees can certainly hasten that change. At present, however, there is no evidence of a grass roots swing of white collar employees toward unionism.

No group can be expected to be more affected or to profit more from automation than our engineers and scientists. Although the hysteria about the engineering shortage has subsided, there is still a shortage of good engineers and scientists, and there promises to be such a shortage for many years to come.

Our future automated economy will need good, creative engineering talent in larger numbers than any time in the present or past. Moreover, all signs point to a recognition of the engineering profession in terms of status and compensation at a relatively higher level.

Most companies have now recognized the need for a sound personnel administration program for engineers and scientists which recognizes them as both members of professions and part of management. The budding engineering labor movement which began during World War II seems to have gained little ground in recent years, and is currently split over a dispute as to whether the engineering unions should include just engineers and scientists, or whether they should also embrace non-professional technicians. For the foreseeable future it seems, therefore, that the potential for unionizing engineers is rather small, provided of course management pursues intelligent and effective engineering personnel policies.

In union relations involving already unionized hourly employees, automation has meant and will mean greater effort on the part of unions to control technical progress and to push toward fringe benefits pertaining to layoffs, severance pay, guaranteed work, etc. It is also not unlikely that the shorter workweek may be revived with automation as the probable excuse for its resurrection—with the real demand, of course, more overtime pay rather than less work.

Up till now, officers of the great industrial unions have generally contented themselves with demanding wage increases so as, in their words, to share in the rewards of technological progress. The speed

with which wages have gone up and indeed outstripped productivity since the end of World War II would seem to indicate that their program has been amazingly successful. Consequently, they have not attempted, as do some of the craft unions in the building and printing trades, to slow down the rate of technological progress or to control that rate of progress. Perhaps seduced by their own image of automation, we now see union officers, who in past years have proclaimed technological progress as a great benefactor of their members, demand controls on the speed with which plants may be automated.

In the course of my observations over the past several years as a teacher, a consultant, and an executive, I have reached the conclusion that those managements which are least interested in technological development are also least interested in preventing union encroachments in that field. On the other hand, in those plants in which management has been most dynamic in applying the latest technological developments to its own processes and methods, the unions have had the least interest and the least success in preventing change and growth. I, therefore, conclude that no matter how strong is the union push in the direction of attempting to control technological advancement and automation, sound management with a desire to maintain its position in this field can prevent restrictions on technological development which do no one good and which can do irreparable harm to the industry and to the workers involved.

Certainly, it ill behoves any company to agree to any limitations on its right to substitute efficient machinery for less efficient methods, even though some labor displacement is the immediate, though not the long run, result. The managements which yield on this question are driving a nail in the coffin of their companies, because the aggressive managements which do not yield will outstrip them in costs and in production at a very rapid rate.

CONCLUDING REMARKS

Automation has, and will pose problems which are bound to tax the ingenuity of all of us. Both as an economist and an active participant in the employee relations field, I am almost daily made aware of the gravity of these problems, and at the same time, of the necessity for us to attack these problems not only with knowledge of past practice, but also with knowledge of principles and with ability to adapt to changing conditions, frequently essential in today's rapidly moving world.

One thing those of us who have worked and studied in this area have learned is to beware of easy generalizations or quick conclusions which are not based upon reasonable observations, let alone actual research. Human reaction to change is both subtle and complicated, and rarely conforms to the pattern to which it is assigned by the uninformed. The ability to take change in stride and to handle the unexpected is a trademark of maturity and competence. All of us in the future, as in the past, will participate in change, will contribute to change, must handle change, and must be able to understand and to profit by change. Automation is, and will continue to be, one of the facts of our fast changing world which we must further, not hinder, to assure best the survival and the progress of our economy.

FACT, FALLACY, AND FANTASY OF AUTOMATION*

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When a Ford Motor Company executive coined the word "automation" a decade ago, I doubt that he foresaw the controversy it would engender. Under the label of automation, management introduced to the public at large, and proclaimed as new and significant, labor-saving, productivity-increasing automatic and automatically controlled machines, methods and processes. The public relations program citing automation as evidence of the virtue of American management ground to a halt, however, when trade unions not only agreed that such technological advances were worthy of notice but moreover had the effrontery to quote these management proclamations in support of union demands for a share in the increased productivity gains attributable to automation.

From that point hence, management reversed itself. In some instances automation was represented as more old than new. In others it was deprecated or ignored. It went so far in some management circles that even mention of *that word* was regarded as most unbecoming conduct. This atmosphere, understandably, has affected the character and quality of research about the economic implications of automation.

THE NEED FOR BROAD, INTEGRATED, AND INTERDISCIPLINARY RESEARCH

Like Caesar's Gaul, all automation research is divided into three parts. There are first the case studies about the economic implications of automation in a single office or factory. These studies usually contain the sanguine statement "there were no layoffs."¹ Such studies are of limited value, however, because the employment effect of automation extends far beyond the confines of a single plant and in fact may be quite different in the industry and the plant studied.

For example, in the BLS study of a modernized refinery there is the customary statement, "No regular employee was laid off as a re-

*The author wishes to acknowledge the valuable criticism of Woodrow Ginsburg and Harry Chester, UAW Research Department. The data concerning employment trends of craftsmen were compiled by Everett Taft, UAW Research Department.

¹ Jack Stieber, "Automation and the White-Collar Worker," *Personnel*, Volume 34, No. 3 (November-December 1957), p. 13.

sult of the changes.”² Yet in the appendix to this study, the BLS furnishes two illuminating tables that cast doubt on the applicability of the above quotation to the industry as a whole. The first table shows that in the ten year period preceding 1957, the number of refineries decreased from 361 to 294 while total operating capacity increased from 5.3 to 8.4 million barrels of crude oil daily. Average individual refinery capacity and capital expenditures in the industry doubled during this time span. The second table dealing with employment, hours and earnings, shows the number of employees increasing slightly, the mix of nonproduction to production workers shifting sharply toward more nonproduction workers and the total number of production workers decreasing by 10,000 to approximately 142,000 during the decade ending in 1956.

I doubt that these contradictions between case study results and industry statistics are unusual. Economic case studies may be further suspect on the ground that they are not representative. In view of the controversy noted previously it is logical to assume that the researcher received no cooperation or access to data except from those managements where the employment picture was favorable.

Perhaps the largest body of automation literature emanating from academic circles falls into a second category, research into the psychological and sociological impact of automation. Studies in this area probably face less resistance because they do not focus upon the employment situation. Nevertheless, many pertinent economic matters are brought to light even if in the most oblique fashion. For example, attention is drawn to the fact that the lower density of workers in the automated factory leads to loneliness. Or, more often, as in the following quotation, economic material is presented merely as background.

The hot mill crews, as we have seen, consist of nine men, in contrast to twenty to twenty-five men or more at the old mills. Yet the new mill manned with a crew of nine men is capable of producing four times as much pipe as a mill manned by twenty-five.³

The cause of interdisciplinary research would have been enhanced if the economic implications of the above quotation were considered within the purview of that study.

²“A Case Study of A Modernized Petroleum Refinery,” *Studies of Automatic Technology*, BLS Report No. 120, p. 6.

³Charles R. Walker, *Toward the Automatic Factory* (London, Oxford University Press, 1957), p. 27.

The third division of automation research provides us with the generalized speculative article. This is usually a survey-type paper reflecting upon what other authors have treated narrowly. Frequently the intuitive insights displayed in these articles run contrary to the case studies surveyed. For example, the nonexistent displacement of the case study is amended in the general article to read "although there is no satisfactory measure of technological displacement, any understatement of its magnitude may conceal the seriousness of the problem."⁴ Although one can find little fault with such a statement, generalized articles would be enhanced if speculation were tested against available empirical evidence. The case studies provide little that is useful for generalization, but trends in pertinent economic indicators should be considered more carefully because they supply information that negates some of the generalities and corroborates others.

Automation research of all three kinds is abundant yet is compartmentalized. Much of what is important lies between the boundaries of these areas. Studies of a plant should be extended to cover the industry. Included within such industry studies should be the investigation of the impact of automation upon trends in output, productivity, employment, prices, wages and profits. Information is needed about the capital requirements of automation and trends in output per unit of capital. Metropolitan labor markets appear to be more appropriate units for study than a plant or industry if the primary consideration is the changing occupational characteristics and retraining problems that are evidenced when automation is introduced. In subsequent sections of this paper I will attempt to blend the boundaries of the three compartments of automation research that I have enumerated and to suggest areas of inquiry and action that in my opinion have been somewhat neglected.

IMPACT OF AUTOMATION UPON PRODUCTIVITY

Each example of automation reported upon by a technical journal or a case study discloses a dramatic productivity increase, and, these examples become more commonplace each day. Yet, we still need most to assess the degree to which these individual instances of greatly increased productivity portend like changes in the economy as a whole.

⁴ Eugene Emerson Jennings, "Automation: Its Justification and Its Effects," *Economic Education Newsletter*, Volume III, No. 2, (June 1955), p. 4. (Published three times yearly by the Bureau of Business Research for the Department of Teacher Education, Michigan State College).

Productivity increases in the past decade exceed those of the previous decades. The 1958 Economic Report of the President showed that the average annual increase in manhour output from 1947 through 1956 in the total United States private economy was 3.9%. This figure reflects in part the extremely high productivity in agriculture during the past decade, but nevertheless it is clear that industrial productivity increased at a significantly higher rate than in the past. General speculative articles on automation unfortunately do not speculate enough about the significance of this increasing rate of productivity. Is it possible that the historically accepted 2½% straight-line productivity growth figure does not accurately reflect productivity trends? Would a slightly upward sloping growth curve fit the facts more nearly than the traditional straight line of the economic text books? The quality of general speculation might be improved if the results of a careful study of the above question were used to buttress general forecasts of the impact of automation.

OUTPUT AND EMPLOYMENT OF PRODUCTION WORKERS IN MANUFACTURING

Many articles about automation overlook what may be one of the most important consequences attributable to automation. I refer here to the fact that employment of production workers in manufacturing has not increased appreciably over the past ten years. There were on the average approximately 12.8 million production workers in manufacturing in 1947 and 12.9 in 1957. The 1953 cyclical high of 13.8 million production workers in manufacturing exceeds the October, 1958 figure by 2.1 million. Forecasts show that the chance of exceeding the 1953 peak appreciably within the next few years is not great.

The failure of production worker employment in manufacturing to expand proportionately to the growth of total employment opportunities does not mean, however, that the output of industry has remained constant. To the contrary, output in manufacturing increased almost 50% in the past decade while the employment of production workers stood still. We have seen sufficient evidence to support adequately the generalization in the literature guardedly stating that future increases in output in manufacturing will come primarily from increased productivity rather than from increased employment.

OCCUPATIONAL SHIFTS, OPERATIVES

Census trends show that "Operatives" who formerly made up one

of the fastest growing occupational groups in the labor force now are expected to grow at a rate slower than that of the labor force as a whole. It would be most helpful to have detailed information about the composition of this growth. Is the reduced rate of growth caused primarily by the substitution of automatic machinery for operatives in the manufacturing sector of our economy? Or, will we find that automation has sufficiently wide application so that the trend apparent in manufacturing will carry over into the other sectors? This is important because it appears easier for the displaced operative in manufacturing to shift to a semiskilled job outside of manufacturing than it is for him to acquire the greater skill needed to qualify for a skilled trades, professional or technical job in manufacturing.

GROWTH OF SKILLED TRADES JOBS

Furthermore, although the "professional, technical, and kindred worker" occupational group is the most rapidly expanding group in our economy, it is not correct to assume (as so many apparently do) that this is equally true of the "craftsmen, foremen, and kindred worker" occupational group. It is true that the mix in most automated factories shows substantial increases in the ratio of skilled craftsmen to semi-skilled and unskilled production workers but this is caused mainly by the sharp reduction in the number of semi-skilled and unskilled workers in the plant rather than an increase in craftsmen. Census data show that although the absolute number of craftsmen is increasing, it is increasing at a rate slower than the growth of employment in industry. The following table shows that the percentage of skilled craftsmen in the total non-farm labor force actually decreased from 15.85% in 1948 to 14.64% in 1958.

CRAFTSMEN, FOREMEN, AND KINDRED WORKERS AS A
PERCENTAGE OF EMPLOYED PERSONS IN
NON-AGRICULTURAL INDUSTRIES

1948	.	.	.	.	.	.	.	.	.	.	.	.	15.85%
1949	.	.	.	.	.	.	.	.	.	.	.	.	15.18
1950	.	.	.	.	.	.	.	.	.	.	.	.	14.73
1951	.	.	.	.	.	.	.	.	.	.	.	.	15.68
1952	.	.	.	.	.	.	.	.	.	.	.	.	16.15
1953	.	.	.	.	.	.	.	.	.	.	.	.	15.50
1954	.	.	.	.	.	.	.	.	.	.	.	.	15.17
1955	.	.	.	.	.	.	.	.	.	.	.	.	14.79
1956	.	.	.	.	.	.	.	.	.	.	.	.	14.94
1957	.	.	.	.	.	.	.	.	.	.	.	.	14.72
1958	.	.	.	.	.	.	.	.	.	.	.	.	14.64

Source: Current Population Reports—Labor Force Bureau of the Census Series P-57, Nos. 66 thru 196, Principally Tables 4 and 15.

Although this trend runs contrary to what much of the automation literature implies, it should be regarded tentatively until more conclusive research is conducted. Perhaps this trend is caused by occupational misclassification or obsolescence of occupational definitions. Perhaps it is explainable in a small part because, even in this age of automation, there are still many instances in this country where mechanization is leading to the replacement of craftsmen by semi-skilled workers. Perhaps there is a decline in the number of craftsmen outside of manufacturing that more than compensates for increasing growth of craftsmen in the major segments of manufacturing. Be that as it may, the figures are clear and furthermore are supported by BLS projections for 1965 that show craftsmen as a slightly lower percentage of the total civilian labor force than in 1950.

EMPLOYMENT EFFECT IN THE OFFICE

Another widely accepted cliché in the automation literature that needs further investigation is the oft repeated proposition that "automation is likely to have its greatest immediate impact on office occupations."⁵ Along with others, I had assumed that the dramatic productivity increases associated with the installation of modern electronic computers would have an employment effect similar to, if not greater than, that of a transfer machine in the factory. Apparently this is not true. During the decade ending December, 1956, the BLS reports that in manufacturing, "nonproduction workers have increased at about 15 times as fast as production workers."⁶

Although the nonproduction worker category includes much more than the clerical occupation, one would not expect to find such changes if automation in manufacturing were having a greater impact in the office than in the factory. Further doubt is thrown on the proposition quoted above by the fact that in the economy as a whole the clerical and kindred workers occupational group comprised an increasing percentage of the civilian labor force from 1940 to 1950 and from 1950 to 1955, and that the BLS projection of 1955 to 1965 indicates that this occupation will have a percentage growth greater than all but one of the nine major occupational groups.

⁵ George P. Shultz and George B. Baldwin, *Automation, A New Dimension to Old Problems* (Washington: Public Affairs Press, 1955), p. 18.

⁶ Ewan Clague, "The Shifting Industrial and Occupational Composition of the Work Force during the Next Ten Years," *The Changing Character of American Industry*, Conference proceeding published by the AFL-CIO (Washington: January 16, 1958), Publication No. 67.

I think it is clear that office and factory automation have not had the same employment effect. Possibly this is because the product of the factory has not changed greatly as automation was introduced. On the other hand, the introduction of automation in the office has been accompanied by the growth of new activities that were not feasible prior to the introduction of the computer. For example, many large corporations have established operations research centers and have attempted to use the computer to supply previously unavailable information such as daily and weekly sales and inventory trends. Possibly Parkinson's laws explain this difference between factory and office automation—each member of the rapidly increasing group of professional and technical workers may require several clerical assistants if he is to maintain the status commensurate with his new and exotic-sounding job title. Perhaps, as was indicated earlier in another connection, occupational misclassification and obsolescence of the occupational definitions play a part in the explanation. Again, however, it is clear that further research into the various categories of jobs within the clerical field and the impact of automation on each of these would be helpful. But, until we know more, it may be fruitful to curtail the use of the phrase that automation has a more immediate impact on the office than on the factory.

THE UPGRADING PROBLEM

Unfortunately, too many people have not examined critically those automation articles implying that the displaced production worker can be transferred to one of the expanding technical or professional occupations. For example, a Ford spokesman stated "The hand trucker of today replaced by a conveyor belt might become tomorrow's electronic engineer."⁷ He might, but then again it is probably more accurate to treat this point as did George Shultz in his excellent and still pertinent article on automation where he pointed out:

automation will not upgrade people; it will only upgrade jobs. This is a simple but vital distinction, for it highlights the crucial transition problems. If John Romano, a 55-year-old grinder in Ford's crankshaft department, is thrown out of work by the introduction of an automated crankshaft machine, and George Pichelski's 20-year-old boy decides to go to a school for electronic technicians instead of going to work as a drill press operator (and does in fact land a technician's job

⁷ R. H. Sullivan, Ford Motor Company, *Wall Street Journal*, Dec. 31, 1953.

two years later at Chrysler), it is stretching language and compressing reality to say that a semi-skilled operator has been upgraded into a highly skilled technician.⁸

The problems of the semi-skilled worker are mounting as automation cuts down the prospect of his returning to his old job. The Director of the Michigan Employment Security Commission recently released to the papers figures showing that "hard core" unemployment in Michigan has quadrupled in recent years from 30,000 to 120,000. He explained this increase with the remark that "It is well established that the auto plants, with their increased productivity, will be able to make all the cars they want with fewer workers."⁹

Such developments point up the pressing need for more intensive studies of displacement and re-employment possibilities in the various major labor markets where mass production industry traditionally offered the bulk of the employment opportunities for semi-skilled workers. In the next few years, the automation-connected decline in opportunities for semi-skilled workers in manufacturing may well turn to the auto producing centers of Michigan and the steel producing centers of Pennsylvania into distressed areas with chronic unemployment in excess of 10%. In such a situation distressed area legislation and revision of the unemployment compensation laws to provide substantial relocation allowances should have high priorities. At this point it may be helpful to categorize and to illustrate briefly the types of displacement problems faced by unions as manufacturing becomes automated.

DISPLACEMENT PROBLEMS

Indirect Displacement—Horizontal Integration. Vertical and horizontal integration in the auto industry illustrate two clearly defined types of "indirect displacement." Indirect displacement arises when the productivity increase associated with the installation of automation by one firm exceed the growth of the product market to such an extent that other firms are forced out of this market. Despite the growth of auto sales in the past decade, Packard and Hudson were forced out of the field. The enormous increase in productivity in the industry has enabled fewer firms to meet the demand. Here we have an example of indirect displacement associated with horizontal integration. It is true that automation alone does not explain why it

⁸ *Op. cit.*, Shultz and Baldwin, p. 11.

⁹ Max M. Horton quoted in the *Detroit Free Press*, November 2, 1958 and *Michigan AFL-CIO News*, December 4, 1958.

was Packard and Hudson that failed. However, the high cost of automation equipment and the necessity of amortizing it over a short period of time put the heavier burden on these two smaller firms. The need for a larger product market in order to make these expenditures economically justifiable is an important part in the explanation of these failures. Shortly before it closed, Packard turned out all its engines and the engines for the large Hudson on one automated engine line. Even this volume did not utilize the automated equipment fully.

Indirect Displacement—Vertical Integration. One instance of "indirect displacement" arising from vertical integration in the auto industry is illustrated by the story of the Murray Body plant. Murray Body formerly supplied about one-third of the body parts used by the Ford Motor Company. When Ford automated its stamping plants it expanded capacity and production enough to announce proudly that automation of its stamping plant facilities had not harmed the Ford worker. This was true so far as reduction of employment at Ford was concerned in 1955; but it omits the fact that the supplier contract with Murray Body was cancelled. Between 1947 and 1955 Ford multiplied its production of cars three times. In 1947, approximately 13,000 Ford workers and 5,000 Murray Body workers produced major stampings for 750,000 Fords. In 1955, 13,000 Ford workers and no Murray Body workers produced the more complicated stampings for 2,250,000 Fords.

The Murray Body example illustrates a problem facing many suppliers. The increased capacity of automated equipment requires that producers of the end product re-examine their traditional policies of obtaining from a supplier a percentage of the volume of a particular component of the end-product. Formerly the major producer planned to produce a relatively steady volume of a part in his own plant and adjust his orders to suppliers to meet market fluctuations. Continuation of this practice, however, leads to an uneconomic use of the increased capacity. The high initial cost and short period over which the machinery is amortized frequently forces the end producer into an all or nothing decision. The purchase of automated equipment is often the signal to the supplier that the feast and famine of yesterday's market fluctuations is to be replaced by all or nothing—that is, all for the major producer and nothing for him.

Direct Displacement. Direct displacement, the elimination of a job by the installation of automatic machinery, is of two kinds. One kind of direct displacement means the permanent layoff of a worker with the loss of seniority and other job-related equities. The other

kind involves the transfer of the displaced worker to another department where manpower needs are expanding. As I mentioned earlier, case studies tend to be confined to this type of situation. In recent years the decline in employment of production workers in the auto industry offers ample illustration of both kinds of direct displacement. Auto employment in 1957 was less than in 1949 even though output had increased substantially. Employment of automobile production workers in 1958 declined by approximately 150,000 men from the 1957 level. A reduction of this size was not achieved by the attrition, retirement and like causes cited in case studies. Thousands of workers were laid off permanently. The workforce needed to maintain former and anticipated levels of production has been permanently reduced.

Unions advance various programs to mitigate the hardships arising from direct displacement. There is first the effort across the bargaining table to see that the worker whose job was eliminated because of automation is transferred, on the basis of seniority, to another job within the same plant or corporation. The 1958 UAW-Chrysler agreement, for example, established a common recall pool in the Detroit area for semi-skilled and unskilled laid off workers with twelve or more years of seniority. In many contracts, such as in the UAW-GM agreement, workers may follow their work from one section of the country to another. Additional mobility is provided for the semi-skilled worker by raising the age maximum for entrance to the apprenticeable trades. The UAW and Ford Motor Company concluded an agreement waiving the maximum age requirement of the formerly over age semi-skilled seniority worker who is now eligible for entrance to the skilled trades program. Negotiations of vested pension rights and separation pay plans when employment is high provide a cushion for the day when direct displacement may occur.

RE-EMPLOYMENT PROBLEMS IN PROSPEROUS TIMES

These efforts, however, are not sufficient to mitigate the hardships suffered by those who are unemployed because of indirect displacement even during prosperous times. For example, the Murray Body plant was closed in the summer of 1954 shortly before the beginning of the 1955 model year. That was a record-breaking year for the automobile industry. Employment and output indexes for the economy were climbing to new highs. Murray Body workers were not job hunting in the midst of a depression but even so, it was not easy to find employment. In a 10 per cent sample survey of the Murray Body

workers conducted under the direction of a university professor in the Detroit area, it was found that one year after the plant had closed down only 71 per cent of the men had gained re-employment.¹⁰

Fifty per cent of the workers exhausted their unemployment compensation benefits before finding employment. The older workers, women, and Negroes, all of whom faced discrimination, fared worse than the young white male worker. All of the women exhausted their unemployment compensation benefits and only half of them finally gained employment after diligent efforts. In order to get jobs many had to take substantial wage cuts. For the sample as a whole, there was an average drop of nine cents an hour. Negroes, on the average, had a wage cut 50 per cent greater than this. It took the average Murray Body worker three months to get a new job; but it took the average Murray Body worker over 45 twice as long.

Other things being equal, skill levels played an important part in determining how fast one could get a new job. Only twelve per cent of the skilled white males under 46 exhausted benefits as opposed to 35 per cent of the semi-skilled and unskilled white males under 46. When one compares the 12 per cent benefit exhaustion rate with that of the 68 per cent benefit exhaustion rate of the unskilled worker over 45 it becomes clear that maturity in an unskilled worker is an undesirable trait so far as hiring practices are concerned. Automation may subject the disadvantaged groups to prejudice *more often* than in the past because automation accelerates the obsolescence of existing facilities.

If the victims of indirect displacement are to be helped we must look to legislative remedies as there is no longer a solvent party with whom one can negotiate across the bargaining table. Unemployment compensation laws are not only inadequate in benefit and duration, but the entire concept is in need of modernization. In most states a man must be actively seeking work to qualify for benefits. In the Michigan law, however, there is a provision which states that a man will not be disqualified for benefits if he enrolls in a state-approved institution of vocational retraining. If he does so he continues to receive benefits for the normal duration and also may receive benefits for an additional eighteen weeks if his training extends over this period. Unfortunately, this excellent provision lies unused because of administrative

¹⁰ Harold L. Sheppard and James L. Stern, "Impact of Automation on Workers in Supplier Plants," *Labor Law Journal*, Vol. 8, No. 10 (October, 1957), pp. 714-718.

roadblocks and the unwillingness of the Michigan legislature to appropriate funds. However, with skill requirements in industry changing rapidly, a more enlightened view of the purpose of unemployment compensation is desperately needed. The need for such a program is not confined to Michigan. It is sufficiently widespread to justify federal support and nationwide application.

ANNUAL IMPROVEMENT FACTOR

When we examine displacement from the other side of the coin it is apparent that we are raising the specter of an economy in which productivity gains far exceed economic growth in particular geographic sectors of the country and tend to exceed the past rate of economic growth nationally. In such a situation, retraining programs, relocation allowances, improved unemployment compensation benefits, reduction of the normal work week, higher average entrance age into the labor force, more holidays and longer vacations and possibly earlier average retirement ages may be brought about. But, as one who does not accept the NAM and Chamber of Commerce propagated thesis of automatic advancement to undreamed of horizons of the morrow, I cannot help but be concerned by the intention of many large managements to prevent such changes and even to limit annual improvement factor type wage increases to $2\frac{1}{2}\%$ annually. The General Electric and Westinghouse Companies for example which at present have contracts calling for approximately $3\frac{1}{2}\%$ annual improvements in wages appear to be girding themselves for a battle to reduce this to $2\frac{1}{2}\%$. If they were to be successful they would compound the problem of increasing purchasing power at a rate commensurate with the increased productivity of today.

CONCLUSION

The economy is being automated at an accelerating pace. Sales of automatic controlling instruments, automatic transfer and feedback type machines, and large and small computers have increased rapidly over the past few years. Numerical control has moved from the M.I.T. laboratory to the factory floor. I can think of no better way to illustrate the speed with which more advanced automation is being installed than by reference to the famous Ford Cleveland Engine Plant No. 1 that opened in 1951. At the time it went into operation it was widely hailed as Ford's first automated engine machining plant. A movie was made showing the wonders of the automated engine

machining line. Today, however, the famous line is the oldest one in operation at Ford. It went from first to last in seven years.

Many of the estimates of the past few years about the impact of automation may become as obsolete as Ford's first automated engine line. If social science research is to be useful in assessing the impact of automation we must shorten the lead time from field research to finished article and the lag time between technological change and assessment of its impact on our economy. Descriptions of the past are interesting and necessary, but valid research in this field should meet a much more challenging standard. Case studies and general speculation alike should be sufficiently up to date to prove useful in the preparation of more accurate forecasts of productivity changes.

It is not sufficient to say that the recent acceleration of productivity may be attributable to automation and like developments. Enough insight into the changes associated with the introduction of automation and the speed and extent of its application must be gleaned so that those people forecasting productivity change and the output level needed to maintain full employment will look to this information as a valuable addition to the tools at their command. If we do not strive to reach such a goal I fear that when, after another four years, the IRRA meets to discuss automation we will have generated only a much larger potpourri of interesting information. If this is the case, it will be an even more difficult task to integrate it into the useful stream of knowledge required to predict more accurately how our economy is likely to behave in the future and to take the proper steps to shape this behavior to our liking.

ORGANIZATIONAL IMPACT OF WHITE COLLAR AUTOMATION

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The working vocabulary of the office worker is slowly changing to include such words as programming, write-outs, bits, core memory, and drum storage. This new vocabulary has come to the office with the introduction of high-speed computers and accessory equipment. These complexes are now coming to be known in the literature as electronic data processing (EDP) systems. Computer systems like the IBM 705 or Rand's "Univac" are being introduced into the office to compute and prepare customer bills, inventories, cost statements, premium notices, payrolls, and a host of other both simple and complicated tasks which have long provided the work base for the white collar worker.

In this paper we shall present some of the organizational and social psychological problems associated with these advanced automatic data processing systems. We will touch on both the problems of managing the change-over to such systems and on the effect of these new systems on the organization and its personnel. Our focus here¹ will be on changes relevant to industrial relations—changes in management philosophy, organizational structure, job content, and transitional problems. We will draw primarily on our own observations from an on-going, longitudinal study in a single firm over a period of years and on the research findings or observations of other investigators studying the impact of this new technology on the office. Our knowledge in this field is restricted in that our research has concentrated on the *intra-organizational* effects of these changes in a single firm. We have not examined certain broad economic and social consequences such as the effects of this white collar automation on the composition of the labor force, the "unhired employee," leisure time activities, and other equally significant issues.

A number of empirical studies now provide us with a better basis for understanding the shape of things to come in this area. These

¹ A more complete description of our findings at this stage of our research is given in "Observations Concerning A Change-Over to Electronic Accounting Equipment: A Case Study." (9) These observations have resulted from informal on-the-job interviews. Since 1954 we have been interviewing personnel at all levels involved in this change-over. This is one of a series of studies being conducted in the Organizational Behavior & Organizational Change Programs of the Survey Research Center, University of Michigan.

include studies of large computer installations in insurance companies (4, 6), a study of an automatic airline ticket reservation system (5), the use of EDP for maintaining inventory control in a shoe company (11), and several studies of the introduction of IBM 650's in large and small insurance companies (7, 8). It is important to stress that the general impact on the organization is greatly dependent upon the degree of mechanization prior to change. This undoubtedly accounts for some of the marked differences in organizational change noted in these studies even where identical equipment is installed.

Technological changes which have been occurring in the past few years in the factory and the office are increasingly labeled "automation." While this general label is useful to connote simply "more automatic,"² most descriptions of these new automated processes have stressed the following basic characteristics: greater mechanization with more frequent use of automatic equipment and multiple, closed-loop feedback systems as controls. These technical and engineering characteristics in combination result in greater integration and centralization of control in systems of production and data processing.

BRIEF DESCRIPTION OF A CHANGE-OVER

A change-over to an electronic data processing system is different than a model conversion in an automobile plant, a turnaround in an oil refinery, or the starting up of a new plant. There can be no stockpiling in advance of suspending operations; there is little or no opportunity to make trial runs of new systems without the continual maintenance of the older system. Because continuity of office activities must be maintained and because the data of the old system can seldom be transferred directly to the new system, a change-over usually extends over a long period of time—from six months to three or four years. A period of transition of this duration results in the organization having to establish and manage three work forces: (a) a group which continues to maintain operations under the old system, (b) a group responsible for converting records and procedures from the old to the new system, and (c) a group responsible for beginning and maintaining operation under the new system.

A successful change-over to a complex EDP system necessitates a major reorganization of existing operations as well as the estab-

² James Bright, in his new book *Automation and Management* (2), feels that the "common usage of automation to mean a significant advance in automaticity is a literal and appropriate application to the phenomena" with which he was concerned (p. 55).

lishment of entirely new operations. There is a compounding of changes as the new equipment and its processes require large-scale structural and functional realignments in the organization. An organizational level may be added during the change-over, and functions are transferred across divisional lines as well as among sections and departments within the division at the vortex of the change.

The change-over is accompanied by a dramatic shift in the activity level of the organization. The equilibrium and relative stability of the organization before the change gets underway is slowly replaced as increasing demands are focused successively on each segment and level involved in the change. Pressures mount as the physical installation of the equipment nears completion, new programs which have been in the process of preparation for months are readied for testing, and the conversion itself gets underway. There is no quick return to normalcy as the change-over nears completion. The organization, slowly adjusting to the new system, settles down to the level of activity required by it.

A change-over to EDP is thus a multiple-phase operation in which there is frequently a compounding of technological and organizational changes in an on-going system over an extended period of time.

PROBLEMS RELEVANT TO INDUSTRIAL RELATIONS

Management's Conception of the Change-Over. Management's conception of the principal problems involved in a change-over determines the extent to which attention is focused solely on the equipment or on the entire system of which the equipment will become a part. When attention is focused on the equipment—"the hardware approach"—management is primarily concerned with the selection of the correct machine or machines for a given operation. The problem is conceived to be one of substitution of machines for existing operations. The potential to be realized by rethinking the division of labor and the resultant organizational structure in a broad way is ignored.

In the system approach, on the other hand, the introduction of electronic equipment is seen as an opportunity for reevaluating organizational objectives and procedures and redesigning relevant sub-systems within the organization. This approach may result in not only a more efficient alignment and consolidation of functions in the immediate area of the change-over, but may also furnish the impetus for reconsideration of activities and procedures in other distant parts of the organization. Changes which could have been brought about with-

out the introduction of an EDP system, but had been postponed for one reason or another, are incorporated into this broader conceptualization of the task. Thus, the change-over is seen as a complex parcel of organizational, administrative, human, *and* technical problems—not simply a technical problem of selection and installation of equipment within old organizational lines. The management which fails to realize that more than hardware is being changed also probably fails to understand the implications of such a change for its personnel policies and its people.

Elaboration of Management Philosophy. A change-over brings a number of revisions in management philosophy and its implementation. Existing policies must be reexamined, made explicit, occasionally changed; new policies must be developed; both old and new policies are given a thorough test as they are translated into action.

As functions, employees, and their supervisors are transferred from one major division to another, the extent to which common philosophies and policies exist is revealed. Contradictions and inconsistencies in the sharing of information, the joint planning of work, and the delegation of responsibility are the basis of some of the problems in this period for both supervisors and employees. The greater interdependence of divisions and their departments necessitates the consideration and resolution of these differences before the new operating system can be established.

A change-over forces further development and elaboration of management's personnel philosophy. That which was implicit becomes explicit; that which was ill-defined and ambiguous is clarified through discussions regarding operating problems; untested assumptions are evaluated against the hard criteria of employee support and rate of progress toward the conversion goal. In particular, the implications of the company's philosophy for the management of change are elaborated.

One of the principal long-range objectives of the introduction of EDP systems is the reduction of white collar clerical and supervisory personnel. This eventual reduction in the number of jobs coupled with the gross redistribution of personnel accompanying the reorganization sets the stage for serious morale problems and resistance to change. To ensure the continued cooperation of the work force throughout the long change period, policies regarding employment security—policies of not laying off or down-grading permanent and long service employees—are commonly developed. All accounts (7, 4, 5) of the problems faced in this period stress the imperative-

ness of formulating and communicating company policy regarding security of employment in advance of initiating change.

These policies typically provide employment security, but not the assurance of a particular job. Regular employees whose jobs are discontinued are transferred to other equivalent assignments at the same rates of pay. Management assumes the responsibility of placing and retraining employees and supervisors in jobs for which they can be qualified.

There are a number of forces which lead management to this formalization of its obligation to its permanent work force. These include: (a) the maintenance of the morale of employees directly and indirectly affected by the change; (b) the utilization of the skill potential of existing personnel; (c) the demonstration of the organization's concern for the welfare of its employees; and (d) the meeting or anticipating of union demands where the group is organized or in reducing the likelihood of unionization. These forces in combination have resulted in organizations installing electronic equipment developing policies which cushion the effects of such technological changes for white collar employees. Thus, the "social shock absorbers" which Baldwin and Shultz (1) implied would have to be developed at the societal level have been accepted by many companies as a part of the cost of the change-over.

Capacity of the Organization for Change. Organizations vary markedly in their capacity for change. Resources—such as previous experience with change, managerial talents, work force skills, values and attitudes—are important conditioning variables. For example, organizations having serious morale problems are obviously ill prepared for such a period of change. Previous failures to manage change effectively, irrespective of the causes, create a pessimistic and apprehensive climate that impedes the transition. Managerial talent barely adequate to maintain existing operations places the success of such a change in even greater jeopardy.

Personnel who have gone through successful periods of change are more willing to accept another round of instability; those whose experiences have been particularly trying have less tolerance for another change. The periodicity with which changes occur in the system is also important. It is probable that organizations having changes every year or two have learned to accommodate to such changes better than those in which major changes occur only once every five or ten years.

The white collar work forces of many companies are probably

less prepared for the prolonged instability involved in a change-over than their blue collar counterparts in the automated factory. The value-orientations of the white collar worker in the large utility, insurance company, and government office are apparently different from the unskilled worker in the plant. The stability of these organizations has been an important factor for these security-minded employees; the instability of the change-over probably finds them, by personality and experience, less ready to meet the demands for adjustments.

The managerial and supervisory capability for administering the change is equally important to an effective transition. Conceptually, we have found it useful to think of the effective supervisor as having three classes of skills: technical, administrative, and human relations skills. Our observations indicate that during a change period different combinations of these supervisory skills are required at different levels in the organization at the same time and of the same supervisors at different times. There appears to be a shift in emphasis from human relations to technical and administrative and back again to human relations skills.

In the early stages of the change-over when the upper levels of supervisory personnel—managers and department heads—are confronted with the job of planning for broad organizational changes consistent with the specific functions of their responsibilities to the organization as a whole, administrative and technical skills become very important for them. Human relations problems are not unimportant, but technical problems of laying down broad outlines of the change-over from old procedures to new procedures demand more time. Simultaneously first-line supervisors are primarily concerned with the human relation problems raised by announcements of impending major changes. Technical skills of the first-line supervisors are not tested until the broad outlines of the change are spelled out and the job of implementing these changes is delegated to lower levels of supervision.

Toward the end of the change-over human relations skills become more important again as employees manning the old and transitional systems have to be fitted into permanent jobs in the new system. By this time the basic technical and organizational problems have been solved, what remain are principally human relations problems: (a) the selection of the personnel for the permanent work force, (b) the elimination of the large transitional work force, and (c) the difficult task of finding appropriate jobs for permanent, long service

employees consistent with the organization's policy of employment security.

Deficiencies in managerial and supervisory capacity become obvious at different phases of the change as different levels are exposed to the pressure by carrying the brunt of the change. These marked shifts in the mix of the three skill components provide a rigorous test for the organization's criteria for promotion. The organization whose supervisory personnel do not have adequate resources in this respect finds the going extremely difficult in the change-over to new EDP systems.

Organizational Structure. Transfer of functions, centralization of control, and greater interdependency of units are some of the inter-related structural modifications that accompany such a large-scale change.

The transfer of functions between major divisions and among departments within a division creates problems for both employees and supervisory personnel. In some cases the work force moves when functions are reassigned, in others only the functions are transferred. These kinds of changes result in the employees being faced with new supervision, new jobs, or both. Strains created by the usual reluctance of managers to relinquish responsibilities are also felt by the employees.

Centralization of control and decision-making follows greater integration in the system. Autonomy and flexibility are reduced. As supervisory tasks cease to exist, the supervisory level of work leader may be eliminated. The first line supervisor's area of freedom is also further restricted. Variations in work rate and work process within a work unit are reduced; most decisions must be made with the larger organizational system in mind. Many of these changes point toward a further loss of self-direction and the motivation which stems from this.

Increased integration also places a greater premium on the rapid transmission of information; communication can not be left to chance but must be highly formalized. There is a need for a nerve center with complete understanding of the integrated system where normal operations can be coordinated and where breakdowns in some part of the system can be interpreted for all other parts.

Job Content and Structure. There are a number of similarities between the technological changes in the factory and the office as they affect the content and structure of jobs. The most routine jobs are eliminated, work pace is tied more closely to machines,

promotional opportunities are reduced, and some shift work is introduced.

A few statistics from our research site provide some insight into the changing structure of the jobs and their content. Prior to the change, there were 140 jobs and approximately 450 positions in the central accounting area. It is estimated that 80 per cent of the jobs were either substantially changed or eliminated, and that this effected 90 per cent of the positions. Moreover, there was about 50 per cent reduction in the number of jobs.

While EDP installation eliminates the routine and more menial clerical jobs, a general up-grading of jobs is not a necessary consequence.³ The net effect on the organization we studied was a change in average job grade from 8.0 to between 8.1 and 8.2, where the range is from 3 to 13. Tasks previously done by employees holding high job grades and by lower level supervisors and which involved known criterion decisions also have been programmed.⁴

New jobs that are created tend to require either new skills or new combinations of skills previously used. While these jobs may be less routine and therefore more socially desirable, within the single organization there is the considerable problem that dislocated individuals may not be able to fill these new jobs. Retraining personnel having a restricted range of talent is not an adequate solution.

Job enlargement does not necessarily accompany a change-over. It did however in the situation we were studying. The work of the non-mechanized accounting groups responsible for the steps preparatory to machine processing was consolidated into a station arrangement with each member trained to handle five operations previously performed separately. The removal of many middle level decision-making jobs also means that there is even less opportunity for progression in the organization. This has long been true for the assembly line worker. The effect that such a promotion limit will have on the white collar worker is unknown as yet, but it will probably disturb his illusion of mobility.

The white collar worker has often thought of his regular, eight hour, daylight working schedule as one of the rewards of his job. Now that management finds it economically desirable to run EDP systems on a two shift basis, it becomes necessary for some white

³ Bright (3) has compiled data from several *factory* sites which corroborate this point.

⁴ The removal of such jobs has also been cited by Rush (10).

collar workers to accept shift work. The recruitment of these white collar shift workers presents new problems. One organization has now changed its hiring policy and employs married women almost exclusively on the evening shift.

Another characteristic of the new work conditions is the low tolerance for error. The highly rationalized system provides less opportunity for multiple checking than previously, and errors may not be caught until they reach either the central processing equipment or in some cases the customer. Specific allocations of work to a single position means that errors are almost always traceable to an individual. For the white collar worker, accustomed to the somewhat anonymous conditions of the typical office organization, this accountability is a new experience.

The specific allocation of work within a rationalized system also means that each job is of greater significance in the continuity of the process. Absences, tardiness, and a high turnover rate take on added importance, and relevant policies are more rigorously enforced.

The new white collar worker also has problems of machine pacing. Operating on a fixed schedule, the system imposes very specific deadlines. While the office worker still has more freedom to leave his work place or to vary his production level than does the blue collar worker, very specific work quotas have been imposed. Feelings of loss of autonomy are reported by both the worker and his supervisor.

Transitional Problems. Problems concerning temporary help, overtime, training, and allocation of the work force are encountered during the transition period. The change-over is a period of increasing work load for the organization. Paradoxically, the very system which is installed to eliminate jobs often necessitates a greater number of workers during the transition period. Added duties and the need for constant retraining result in a significant increase in required working hours. Both overtime and a temporary work force are needed. The recruitment of this temporary work force and its introduction into the organization presents important issues, especially where the workers are organized.

In our study as well as in Craig's (7), supervisors complained persistently about training and overtime. The problem of overtime was heightened because of the large number of women employees who were restricted in the total amount of allowable overtime as well as the amount permissible in any one day. Excess in overtime

appeared to result in lower productivity, and certainly in complaints about home life and leisure activities.

Training is a burden for all personnel during the change-over. In the two major divisions affected by the change-over in our study, there were 800 individuals who had to be retrained to some degree. Training for new jobs is often relatively abstract. The trainer can only describe what the new jobs will probably be like. Initially there is no opportunity for on-the-job training. In addition, many have to be trained for jobs that are not to be permanent assignments but instead are transition jobs, and some of the motivation for learning is thus lessened.

Because of the simultaneous operation of the new, transitional, and old systems, the efficient assignment and reassignment of the work force becomes an important problem. Care must be exercised that those assigned to the old or the transition jobs are not overlooked for eventual assignment to new jobs. Another problem exists if one has to replace an individual who has been operating at a new job for a year or more with a more qualified candidate who was essential to the maintenance of the old or transitional systems.

While these are problems of transition in terms of their origin, their effects will be felt in the organization for an extended time unless properly managed.

The six major problem areas we have selected for presentation in this paper are not exhaustive of the problems confronting the organization or its personnel during a change-over to electronic data processing. The topics considered here have been included because they have received less attention.

It has of course been possible to indicate only the broad dimensions of these problems. These findings do indicate however something of what we have learned about the effects of these technological changes on the work world of the white collar worker. This is clearly an area where quantitative, longitudinal, multidisciplinary research in a number of organizations is needed.

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DISCUSSION

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It is fruitless to argue about definitions of automation or whether automation is generically different from anything that has come before. Technological change is as old as man's existence on the earth. The history of all societies is a history of invention. And American industry has faced and coped with technological change since the beginning. Certainly devices which utilize a closed-loop feed back principle were known and used more than a century ago; instruments for measuring and machines for processing information are not new. But what is new is the increasing rate at which innovation and change is being developed and put to work in industry. And what is new are the increasing number of people and situations which are affected by each added increment of technology. What is new is the shorter and shorter lead time from laboratory to shop floor and, accordingly, from the development of an abstract idea to its practical effects on living people and on-going organizations. And anybody who would assert that this presents no new problems is, in my judgment, either naive or just uninformed. The installation of giant computers, the operation of an auto plant built around almost continuous transfer mechanisms, chemical plants and oil refineries which are operated by a handful of men watching dials and gauges may be the most dramatic instances of the new technology. But a longshoreman who is displaced by a relatively simple conveyor belt loading cargo directly in a ship's side will not have his new insecurity allayed by telling him that this is simple mechanization and not "automation." The steelworker who now taps 150 tons of steel from an open hearth furnace instead of the previous 90 tons will not be convinced that he has no problem because his job has not really been automated. The steelworker and the longshoreman and the air line pilot and the machinist and a rapidly increasing number of other occupational groups may all see the increased productivity of their work tools as "automation." It will do no good to deny the basis of their increasing complaints of speedup or displacement

“because of automation” by attempting to invoke a precise definition of the technology.

The point of these comments is that we are only at the very beginning of scientific and technical breakthroughs, both theoretical and applied, on an enormously broad front. No industry, occupational category or job, and no union is immune to the changes today being drafted in the laboratories and tomorrow applied to the machine and the worker. And it is not enough to just push this off by pointing to the past or the “long run future.” If the problems are not generically different, they are grossly different in the magnitude of their effect and the shorter and shorter time in which these effects are felt. More than thirty years ago W. F. Ogburn pointed out that the rate of technological change follows an exponential growth curve rather than a straight line; when twenty inventions are added to twenty others, the total possible new combinations of tools and applications is more likely to be 400 than forty. And the larger the scientific and technical fund of knowledge, the more and more sharply the curve turns upward. In my judgment, we are now at a point on the curve of technological change where its slope begins to increase very sharply.

Professor Killingsworth speaks of this in his paper. He concludes that the studies we have thus far are too few in number to justify any broad generalizations about something as complex as automation. But the available evidence shows that automation, defined broadly or narrowly, yields substantial reductions in manpower requirements per unit of output. The studies also show that in almost all cases jobs have been found elsewhere in the plant for those displaced on a particular operation.

This does not jibe with Dr. Stern’s evaluation of the causes of the “hard core” unemployment in Michigan or the experiences of former Packard, Hudson, or Murray Body workers. Perhaps the discrepancy lies in the research questions asked. “Why did Packard, Hudson, and Murray Body go out of business and what happened to their employees who were left stranded?” is not the same thing as asking “What happened in the ABC insurance company when they installed an IBM 704 computer?” Both questions are important but they will yield different kinds of specific knowledge.

Dr. Stern argues that case studies of single installations tell

us little or nothing that is useful in measuring the employment effects of automation. The studies are made in firms that are expanding generally or in firms that have been able to assimilate in other occupations directly displaced workers. As researchers, says Stern, we do not have easy access to firms which contemplate layoffs as a result of technological innovation or, in fact, have experienced them. My own efforts to learn something of the impact of an IBM tape input 650 installation offer, for me, some evidence in support of Stern's position that studies of employment effects of technological change may be loaded from the outset.

But if we don't learn anything useful about displacement, case studies can tell us a number of other things. They can tell us something of how technological change affects the worker and the organization in which he works. Case studies can tell us something of how technological change modifies the network of social relations at work, both formal and informal. They can tell us something of how public identity of the job is lost or gained by the new technology. The micro studies can point to ways in which management extends its control functions and the new technology alters the degree of discipline or independent judgment-making content permitted at work. They can tell us something about how an ongoing organization adapts structurally and functionally to changing technology. This is the direction the Mann-Williams studies are taking. They offer ample evidence to suggest that the installation of a computer may generate a host of new and vexing problems at the same time that it solves some old ones. And this kind of knowledge is no less relevant than knowledge of the effects of technological change upon wages or levels of employment.

A few years ago, Robert Merton noted the paucity of reliable knowledge in these areas. "What is known about the effects of changes in methods of production upon the problems, behavior and perspectives of the worker is little indeed," he wrote. "What needs to be known is very great. . . ." Merton, like others, pointed out that research in these matters is not a panacea for the social dislocations ascribable to technological change. But research can indicate the pertinent facts of the case—it can set out the grounds for decisions by those directly affected by the multiform effects of technological change. And social research in this field remains impressively limited.

GEORGE P. SHULTZ

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The word automation has had a roller-coaster career, hailed and damned by managements and unions in turn. Too often it has been a word over which we choose up sides rather than a technology and concept about which we seek objective knowledge and advance responsible, even though conflicting views. It is a pleasure to comment on papers that do not take us for a further trip on the roller-coaster. In fact, it is interesting to note the many points of agreement among members of a panel including a man each from the General Electric Company and the United Auto Workers Union, two organizations with a tradition of forceful, sometimes militant expression of views that are often in conflict. There is conflict of opinion here too, but the points of agreement, in some instances almost common assumptions, are worthy of note.

There is a common assumption that we are dealing here with a technology and an organizational concept of importance to our society generally and to unions, managements, and employees. Each paper illustrates the importance of automation with an example or two. It is apparent that each panelist recognizes that automation touches a wide range of jobs—"white-collar" workers at various organizational levels, as well as production workers, are likely to be affected. In most cases, the process of installation is identified as a long one, allowing for personnel as well as equipment planning. The account by Mann and Williams of the issues involved in personnel planning for a major change is particularly noteworthy. There is no suggestion in any of the papers that automation will bring on mass unemployment. On the other hand, there is general recognition of the fact that personnel displacement is an almost inevitable consequence of automation, though there is disagreement about the seriousness of this problem. It has not often been possible, however, to secure this much agreement about automation on a panel with the composition of this one.

Each paper comments on automation's impact on the structure of demand for labor. It is with the shifts involved here rather than over-all employment levels that problems are identified. I certainly agree, but at the same time I want to make two points about these shifts to clear up what I feel are ambiguities in the papers.

- (1) We must bear in mind the distinction between automation's impact on the level of skill required in a particular job and its impact on the skill mix more generally. To find that many jobs are changed but not upgraded is not the same as finding that the skill mix has been unaffected. Thus, if automation does no more than eliminate the most routine jobs, it raises the skill mix, even though no particular job has been upgraded.
- (2) We must also distinguish in our analysis automation's impact at varying levels of breadth, that is, the numbers of production workers in a company, the company labor force as a whole, and the composition of the labor force for an industry or the economy. Indeed, as the papers suggest, it is the *gross* upward shifts in the structure of demand for labor that give rise to special problems, since retraining of lower-skill workers may not be a possible adjustment mechanism in these cases.

At any rate, I believe it is becoming more and more clear that automation shifts the structure of demand for labor upward, *if* we look at the structure broadly and in terms of proportions. But this proportionate change does not mean that absolute numbers in certain job classes will not decline sharply or that all skilled classifications will increase in terms of absolute numbers.

The resulting structural problems in the labor market are further aggravated, as Killingsworth and Stern point out, by the fact that employment declines are often serious for particular communities. I believe this problem has been identified clearly enough by now to justify action on the public policy front, rather than simply further research. Thus, one of the implications of Killingsworth's paper is, I think, that the Federal Government must stand ready to do more than it now does to help local citizens in their efforts to rescue their communities from severe economic distress.

I found the Mann and Williams development of changes in the nature of white-collar jobs and their analysis of the multi-stage process of change to be particularly interesting and enlightening, though it seemed to me that some of their characterizations of the white-collar worker may be overdrawn. Indeed, my impression has been that change is easier to install among white-collar than blue-collar workers because of the predominance in white-collar ranks of young females whose job and labor force turnover is relatively great. Thus, given a good job of personnel planning, large changes can be made with few if any layoffs.

Mann and Williams also alluded to organizational shifts within management that sound interesting to me and that I hope they pursue in their research. In fact, if I may conclude by commenting more generally than called for by the title of our session, it seems to me that the white-collar, the professional, and managerial ranks have not been given enough attention in industrial relation research, and I hope that more attention will be devoted to these areas in the future.

Part III

**VALUE OF INDUSTRIAL AND
HUMAN RELATIONS RESEARCH
TO LABOR AND MANAGEMENT
LEADERS**

PRACTICAL OBJECTIVES IN INDUSTRIAL RELATIONS RESEARCH

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DEFINITIONS

Preceding speakers have developed several definitions of terms that are as useful in this paper as in theirs. Perhaps, however, the two terms from the title of these remarks, *practical* and *research*, deserve special mention.

For this discussion of *Practical Research Objectives*, the term *practical* may be regarded as meaning "reasonably attainable." Objectives to be considered might be described as "realistic," as distinguished from impractical and unrealistic objectives, where the latter represent goals that are beyond the limits of likely attainment.

Research, for the purposes of this discussion, is defined rather simply and broadly as *purposive but objective, systematic investigation and analysis*. Our reference here is to research *that is planned and directed by university staff members*. It should be clear to all of us that as much and perhaps more could be said about the practical objectives of non-university research in this industrial relations field.

Our discussion is not limited to any particular type of research, in terms of *detailed* subject matter, point of view or scope. It includes projects usually described as *pure* research (no obvious, immediate applications) as well as those identified as *basic* research (widely applicable to several problems) and *applied* research (designed to solve a limited, specific and immediate problem). Nor does our interest in practical objectives imply limits on research methods, so that we include empirical and logical studies, surveys, quantitative designs, case studies, historical studies and others.

The research whose objectives are regarded as practical may or may not be *sponsored*. It may involve contracts with firms, unions or public agencies. It may, on the other hand, be a part of the ongoing planned and scheduled program of a university's industrial relations school, center, institute, or division.

One restriction should be placed on the research whose objectives are to be noted. It must probably be *group* or *institutional* rather than personal or individual. It is doubtful that the individual study of a single faculty member or graduate student can attain the "practical objectives" to be outlined in the paragraphs that follow.

FACILITATIVE, EXPEDIENT RESEARCH

Some of the practical objectives of institutional research involve more impressive contributions to knowledge and to the process of education than others. Some results are incidental but not unimportant. Thus research may encourage the development of valuable libraries, reference systems, and bibliographies. Some of these practical objectives are facilitative, expedient and mainly useful in *providing a setting* for continuing research rather than in the actual contributions to knowledge they may make.

1. As an example of these less impressive but important practical objectives, it may be noted that research may be an effective means of *melding the interests of employers, unions and universities*. It provides a common ground for noncontroversial collaboration. A research program opens doors in both firms and unions. It may interest their managers and leaders in a whole, broad educational program and thus be helpful in enlisting their cooperation. "We have a research program" is an effective opening sentence for a visit or a letter. This is especially true if the receiver or listener suspects that he or his organization may later appear as a horrible example in Chart 1, or as Exhibit A in the "questionable" group. Research may be the one activity in which all the parties to employment relationships can cooperate with enthusiasm.

Research findings can help the parties solve their problems. Further, the give and take in which research results are given to employers and unions and in which they report back on their experience lays a substantial foundation for continuing cooperation as well as advancement in knowledge and understanding in our industrial relations field.

2. Research also *opens doors for favorable public relations*. Research proposals and findings are news. Research presents faculty members in what is perhaps their most favorable light, as Diogenes-like scholars bent on the search for truth. As a researcher, the faculty member appears as no protagonist nor advocate. He is neither pro-union nor anti-union. He isn't out to put something over or make a "big deal." He has no "sales pitch" beyond the plea for cooperation in the advancement of understanding and the betterment of life. This role, for many of us, is our most attractive and appealing. Perhaps we should all play it more often.

3. It is well-known to all of us that another facilitative objec-

tive sees research as a *source of financial support*. Research has a wide appeal, as has been repeatedly demonstrated by Easter Seal, polio, heart and other medical campaigns. Firms and unions that might regard a direct contribution to the operating expenses of an education institution as of questionable propriety often have no hesitation about subsidizing research. Foundations have long regarded research as their natural off-spring and hence deserving of continued support. Research plays second fiddle only to scholarships as an attractive lure for alumni funds and other institutional hopechests.

Funds granted for research can help an institution balance the budget for other activities. Research can be made to pay its way, and then some! Post-World-War II practice in contract research with federal agencies developed new systems of accounting that cover a wide range of non-research activities and expenditures usually described as "overhead." These relationships have created a new system of institutional tipping (at a usual rate of 40 to 50 per cent) that has tided many a department over a period of hard times.

IMPROVED PRACTICE FROM RESEARCH

4. For the most of us who are active in research, a more important practical objective is that in which research makes continuing direct contributions to *improved practice*. In this objective, research joins in the attainment of what may be regarded as the basic objective of professional education, the continuing improvement of practitioners and the arts they practice. To a large extent, this result may be achieved by effective research reporting in the professional journals and in conferences such as this. The effect is even more direct when representatives of unions or management join in research. The practice of local union leadership has unquestionably improved, for example, as a result of studies of member attitudes, just as managers have improved their practice after participating in employee morale studies. Many other improvements in practice can be traced directly to on-campus research.

For attaining this objective, additive studies have special value. Continued advances are facilitated when studies build on each other, piece by piece. The effectiveness of single, discrete studies, not replicated and not tied in with other related investigations is likely to be much more limited.

RESEARCH AND EDUCATION

5. Another practical objective is that in which research is expected to *improve classroom instruction*. In the industrial relations field this objective is most important. Continuing participation in research on the part of faculty members is almost essential for satisfactory teaching. In a field as dynamic as that of industrial relations, the faculty member who does not participate in research is likely to become a purveyor of outdated explanations and generalizations. To put it another way, the inquiring mind is exercised in research; it tends to atrophy in the absence of such exercise. All of us know faculty members who argue that they need to do no research to maintain interest in it, and such a position is clearly tenable. For most of us, however, participation in research encourages interest in the research activities of others. It helps us in bringing a dynamic, continually questioning and expanding type of analysis into the class room.

6. Similarly, to the extent that students—generally graduate students—can be brought into direct participation in research, it can be a most effective *teaching device*. Research takes the student directly into problem-solving, which is one of the oldest, most thoroughly tested and most widely approved learning processes. Research presents the student with a whole series of problems, from that arising in initial attempts to formulate the statement of an hypothesis through problems of definition, operational hypotheses, model building and research design, data collection, processing and analysis, and the presentation of findings. Participation in each of these stages provides an opportunity to *learn by doing*, a teaching technique of demonstrated effectiveness. Research is thus one more string on the faculty bow—one more arrow in the instructor's quiver.

7. Participation in research also helps students develop a *professional* attitude and approach to the field. If there is one outstanding characteristic of the professional, it is that of continuing, never-ending learning and growth. Student participation in research develops a keen appreciation of the need for added knowledge and new insight. It tends to foster a spirit of continuing investigation and experimentation. Because the student learns these values by doing research, a deep and lasting impression is created. From this experience, students may be expected to maintain a healthy regard for their own continuing professional growth throughout the years of their careers.

8. Finally, student participation in group research projects provides what is probably the most effective single mechanism for *inter-disciplinary education*. For this purpose, divided majors and minors have their place, of course, as do interdepartmental seminars and colloquia. They do not compare, however, with the educational process that takes place when graduate students whose majors represent several disciplines work together on a challenging problem. Mutual interest in the problem provides an impressive motivation for learning. In such a problem field as industrial relations, in which the most important research problems rarely confine themselves to the bailiwick of a single discipline, this particular educational value may well deserve top billing.

SOME VALUES OF RESEARCH IN INDUSTRIAL RELATIONS AND HUMAN RELATIONS

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Our assignment here this morning is to make some comments about the value of research in Industrial Relations and Human Relations to labor and management leaders. Actually it is the ultimate in brashness for any one like myself to take on this assignment. Why I was asked and even more why I agreed to accept is a puzzle to me. There are several reasons why this is so.

1. In the first place there is an assumption that the fields of Industrial Relations Research and Human Relations Research are well defined and have something in common. As a matter of fact, there is more truth in the latter part of that statement than in the former. I believe that the two fields do have much in common, but I am not at all sure that I know what they include.

2. Secondly there is an assumption that I am sufficiently knowledgeable about the activities and productions of these activities, the reports, publications, speeches, and findings of them to be able to assess their values. This assumption may be quite unwarranted and contrary to fact.

3. Third, having admitted a less than perfect familiarity with the entire field and being one who devoted his efforts to only a limited part of the total field, there is some risk that the values I see may be in that part of the field I call my own.

4. And fourthly, I am supposed to present the values from the point of view of management, which might lead some of you to think that I represent line management, whereas in fact my management experience is largely limited to managing the very kind of research we are talking about; so of course it's valuable, and we have nothing to discuss. But maybe I am in the position here that I get into at home. Being a Ph.D. myself and being somewhat antagonistic to the attitudes expressed by those holders of the M.D. who talk and act as if they were the only legitimate "doctors," we at home pull a little switcheroo on an old story. When we have visitors who are introduced as "Doctor" my children ask, "Are you a real doctor like my father or just an M.D.?"

But so much for the apologea. Since we are all in the business of research in the broad general areas of Industrial Relations, Employee Relations or Human Relations, there would be little point in our telling ourselves how valuable our production is. Of course, we are all in favor of womanhood, democracy, righteousness, and research. Likewise, we are against sin, over-indulgence, and decision-making based on "they say," "we believe," and "I think" instead of on fact, evidence, and statistics. Our purpose here today then is to discuss some of the relevant kinds of research and their value or values to management.

As I tried to think through the kinds of activities that researchers engage in under the general names of Industrial Relations and Human Relations, I found it difficult to define the field. It occurred to me that one way would be to see what members of this association do, what they make speeches about, what they write papers about. This turned out to be a hopelessly large venture, a big research problem in itself.

Next, I decided to look at the major fields of activity of relevant organizations such as university industrial relations institutes and centers, research foundations, appropriate government agencies, research units in labor, business, the military, and the like. The result, as you well know, was to find that they encompass practically the entire field of the social sciences and more.

One interesting thing I did notice was a tendency to limit the term Industrial Relations more to what I will call Labor Economics and Union Relations and to use the term Employee Relations or Personnel Relations for the broad field of Human Relations in Business and Industry at the same time retaining Human Relations to designate the inter-personal relationships.

The terminology is really quite loosely applied and badly needs some redefinition and standardization. But I hope that we can talk ourselves out of this confusion by just ignoring definitions and agreeing that the kind of research we will consider is all of the research having to do with the people side of the business as opposed to the technical and operational aspects.

Therefore I am going to try to consider our research in terms of five categories of activities which people like us engage in and see if we can specify some of the values and limitations in them as they might be seen from the management point of view. These categories

are obviously arbitrary, and on another occasion we might restructure them to fit our needs.

The categories I shall designate :

1. Generation of primary or basic data
2. Library and re-compilation studies
3. Personnel research
4. Inter-personal and inter-group relationship studies
5. Laboratory studies.

Let us consider these categories in order and in a little detail.

1. Generation of primary or basic data.

There are a great many researchers who devote a great deal of effort to the definition of problems and the development of methodologies for collecting data relevant to their solution. Mostly such researchers are in government agencies, universities, research institutes, foundations and the like. These are the people who count and/or measure things, people, and events. They make surveys, devise questionnaires, make censuses, develop report forms and systems, etc. Their interest is in getting facts. They may be interested in facts for facts' sake though usually there is some recognized need to be met before their studies are initiated.

For example, they may collect data on accidents to study their frequency and severity. They may accumulate data on unemployment, the composition of the work force, cost of living and the like. The data are of interest per se.

But it seems to me that the results of their labors, as published, seldom have much direct utilitarian value to management. Their big value though, and it is a big value, lies in the methods and procedures they develop, and in their contribution to what might be termed 'sanitation' of the basic data which others will use. If these generators of primary data do not produce valid data, the rest of the world will be sadly misled.

There is one immediate value to management from their work though. When, for example, a researcher publishes the nose count of a survey of vacation policies, any specific management can immediately see how his organization stacks up against prevailing practice. He is sort of in the position of the rooster who looked through the fence at the egg laid by the ostrich in the next yard. He called the hens of his flock together, pointed out the egg and said, "I don't want to seem to be critical, but I would like to call your attention to what our competitors are doing."

2. The second category of research—Library and Re-compilation Studies—is what I think the researchers in business and industry do most. This may also be true of researchers in labor organizations, too.

Their main function, it seems to me, is to study data already collected by our category-1 people, select appropriate parts of them, re-compile them, perhaps do some statistical analysis on them, perhaps develop some secondary derived data from them, and answer specific questions or provide specific guidance for managements who must make decisions or develop policies. These researchers are more interested in summary statistics, inter-relationships, trend indexes and the like than they are in the basic data themselves.

Their work probably is seen as having more direct utilitarian value to management who talk about its down-to-earth practical applications to the business. Of course, they could not get along without the production of the category-1 people, and I think management realizes that full well, but may not be so likely to express their appreciation.

3. Researchers in category 3—Personnel Research—are likely to be appreciated in different ways than those in the preceding categories. The field is fairly well defined and formalized, having to do more with the development of tools and procedures for emphasizing individual differences among people rather than the development of generalizations.

This kind of activity is probably most familiar to us in selection of personnel, appraisal of job performance, personnel placement and assignment, and personnel development. The emphasis is on production of validated measurement procedures so that individuals can be treated as individuals. The results of personnel research are directly applicable to personnel operations and practical values can frequently be demonstrated.

But one big limitation on the values from such research must be emphasized. The measurement tools developed are worthless without the cooperation of the individuals they are used with. The implication is that values from this kind of research are closely tied to the participation of individuals other than the researcher in the research itself. I am convinced that the lack of such participation and cooperation has been the cause of some valueless research in this area.

4. The fourth category of our research interests I have called Group Relations Research. This isn't a very good name, and if it were not for the fact that the term Human Relations Research appears in the subject we are supposed to be discussing,

I would have called this category 4, Human Relations Research. The activities I have reference to are those in which attitudes, morale, inter-personal relationships, group behavior are the general subject matters. In general the research is more observational, less measurement oriented, less mathematical, and less objective than in our preceding three categories. Let me emphasize the "in general" limitation because there are notable exceptions as you all know.

The researchers are usually more concerned with operational inter-relationships and with social-psychological generalizations than with instruments, specific methods, or even with quantitatively stateable findings. It is frequently more difficult to generalize results than in the preceding categories. The values, in terms of management perceptions, are in the relatively immediate production of change. This whole category of research is one difficult to carry on in the laboratory: it is successfully done only in an on-going operational organization of some kind.

5. My fifth and last category of research is the laboratory variety. The researcher can define his problem, build an appropriate, even artificial, setting in which to do it, select the kinds of people he wants to do it to. In other words, the researcher sets his own limits. He may define a broad general problem, but change as he goes to a study of some highly specific detail without loss of face. He may finish with highly quantitative factual data from which he can draw very specific conclusions. The only limitation from the management point of view is that no one can think of any useful applications. We'll come back to this later. And very little of it has been done—relatively, that is.

Now my purpose in attempting to structure the field of Research in Industrial Relations and Human Relations is to prevent the drawing of too broad generalizations about the values of such research from the management point of view. It's a little like working in a highly decentralized organization such as the one I am in. When someone asks "What do you do about X in your company?" I always have to answer that "Whatever I tell you as a general practice, it is likely that in some part of the company the opposite is true." The same may be true here.

All of the philosophical, intellectual, academic, idealistic values that result from research in any field of endeavor also apply from the management point of view here. Ideas beget ideas. One research

finding stimulates interest in others. A simple finding frequently causes an "I wonder what the result would be if——" reaction, and perhaps other research is born.

Some of the research done in academic centers has direct and immediate applied values. This is likely to be of the category 1 and 3 variety. In my opinion the research on methodology of the other categories is equally applicable. On the other hand, there is quite a gap between the publication of results of a great many researches and their absorption into the day-to-day operations of a company. This is all right, too. As one of the speakers at a recent Princeton Conference pointed out, "Basic Research should be a function of the academic-type organization, applied research built on it becomes a function of the profit seeker."

Part of the assignment given us this morning was to criticize the research in this broad general field done in university centers or sponsored by them. "Tell us what is wrong with what we are doing" was the way it was put.

My answer has to be, "There's nothing wrong with what universities are sponsoring or doing." Of course we may not be interested except in an academic way in the specific problems or topics being selected for study (I don't use "academic" in this case as a synonym for "useless" either). But that should not deter the researcher from studying what he is interested in studying. And somebody in business management may be interested in what he does.

We might be more interested in many studies if the reports on them were better written for our readership. There is a tendency for many reports to be organized and to read like the classical formula of the doctoral dissertation. A long statement about the history behind the problem, a defense of the importance of the problem, a review of relevant literature, detailed statements of methods and procedures written to impress professional colleagues, presentation of data in as many different ways as possible rather than in the one simplest way, writing all the petty limitations and weasel-words into the interpretation of results and conclusions as a defense against critics, all tend to discourage readership among our ranks. I realize that there is at least one good reason for reports to be written like dissertations, namely, that's what many of them are. And as an old academician myself, I know how fond a writer becomes of his own words. But a good "rewrite man" might increase the value of research reports and hence of the research itself. Certainly the rewriter may miss some points or may not get all the limitations in, but his efforts will prob-

ably be less objectionable than what will happen when the popular press does its rewrite job if the university center doesn't. I suppose what I am saying is that there isn't anything wrong with the research that's done—the "wrong" is in the way it is reported. You can all join in the old refrain because I am sure it isn't new to you: "Too long, too wordy, too late."

THE VALUE OF UNIVERSITY-SPONSORED INDUSTRIAL AND HUMAN RELATIONS RESEARCH TO LABOR LEADERS

FRANCIS A. HENSON

International Association of Machinists, AFL-CIO

When John McConnell asked me to prepare a paper on this subject, I agreed with alacrity, because I consider it an honor to be asked to speak to such a distinguished group and because I have strong convictions about the contribution that university-sponsored research can make to the labor movement. As for other research, it should be clear that labor has used extensively, and with great awareness of its value, research of the Bureau of Labor Statistics, of other government bureaus, and of private research organizations.

My first research on the project took the form of planned conversation with workers' educators, research directors of unions, and university professors—with considerable note-taking. This extended from July, 1958, to the present. I also prepared and sent out the attached questionnaire (see page 98) to 36 workers' educators and research directors of international unions and state AFL-CIO councils; I chose the ones known to be doing the most important and full-time jobs in these respective fields. Only 20 questionnaires were returned by mail, but I checked 11 more by telephone, and my summary includes 31 answered questionnaires. I received much better returns from workers' educators than from union research directors because I know them better personally and perhaps because the researchers felt that this was primarily a study of the consumer of research.

As I expected, the returns show considerable skepticism of the usefulness of university-sponsored research. However, I am convinced, from my 25 years of experience in the labor movement, that the picture is not as black today as it was even ten years ago and that there is an increasing appreciation of the contribution which can be made to the labor movement by the universities.

In answering Question Number 1: "Have you found any specific research in the fields of industrial and human relations useful recently? If so, what?"—the following names or projects were mentioned, and I grade them in terms of the frequency of listing:

Research by Joel Seidman, University of Chicago
(One listed: "The Worker Views His Union")..... 4

“Membership Participation in Local Unions”— Kahn and Tannenbaum—also other research by professors at the University of Michigan.....	3
“The Local Union”—Strauss and Sayles, Cornell.....	3
“When Labor Votes”—Arthur Kornhauser, Wayne.....	3
“Automation in the Auto Industry”—William A. Faunce, Michigan State—1958.....	1
“Research” by Father Theodore V. Purcell, Loyola.....	1
“Race Relations Law Reporter”—Vanderbilt University Law School.....	1
Research by Columbia University.....	1
“The Social Problems of an Industrial Civilization,” Elton Mayo, Harvard.....	1
Studies of the University of Chicago on Geriatrics.....	1
Studies of the UCLA on Legislative Education.....	1

Only one workers' educator mentioned the following research journals as being helpful:

Labor Law Journal
Industrial and Labor Relations Review
American Economic Review
Quarterly Journal of Economics

I purposely list the summary in terms which come closest to paraphrasing the actual answers on the questionnaires.

Three answered “No” to this question; eighteen answered “Yes.” Presumably the ten who did not answer have not found any studies useful recently.

Few took the trouble to point out anything worth reporting as to how research had been found useful. The best answers were:

1. To corroborate pragmatic conclusions.
2. To convince union leadership of “facts.”
3. For training of stewards and other levels of leadership.
4. For speech writing, quotation, etc.

and

Such factual information bolsters discussion sessions geared to building membership participation and creating projects based on membership interests.

In answer to Question 3, “Do you (or does your union) have strong feelings on whether it is desirable to use university-sponsored research in these fields?” and the sub-question: “What are these feelings?”—nineteen welcome research; the remaining answered that they did not have strong feelings on the matter or did not answer at

all. From other answers, it is clear that few technicians in the labor movement today are completely opposed to the use of university research. Showing some skepticism, however, were three who commented:

- (1) I believe that unions should develop a technical staff of professionals who could do the research more cheaply and far more effectively. (and later on the back) In the last analysis, the officers of the union will have to take the study and utilize it. A study done by one of the union's staff—even if it is critical—is far more likely to be utilized than a study by some “big-name” college professor. Of course, this presupposes that the officers are interested in receiving a critical, objective study of the problem.
- (2) We use university-sponsored research whenever it seems useful and/or interesting. Much of it seems inconsequential—even when not incomprehensible.
- (3) My impression (which I find it hard to document) is that most of the industrial relations research is a lot of busy work in an area where the subject matter is not well defined and the purpose and value of the research not clearly determined. I feel that we should urge greater attention to what is frequently called “action” research, but which I would call the experimental approach. In other words, I think surveys and cross-sectional studies are of little value and that social scientists ought to be studying action programs of groups such as unions and managements. What we really need to know is whether decisions that are taken to accomplish a certain purpose and actions taken to implement these decisions really do result in accomplishing the purpose and if not, why not. Thus, I would urge some of the researchers to follow some of our education programs or other kinds of union programs to help us understand the reasons why we may succeed or fail.

A building trades' union reports, “Our union has used only sparingly university research and has never made it a point to disseminate any information.” One very able director of workers' education pleads, “Frankly, one of the problems is getting time to read some of the material, particularly detailed material.”

In one of my long interviews with a workers' educator, who did not send in a questionnaire, he presented a very pessimistic, if not cynical, view as to the desire of any of the elected officials of unions today (with whom he is acquainted) wanting anything remotely re-

lated to *objective* research. Consequently, when I told him of the results of my study, he was convinced that the workers' educators, whose viewpoints I am discussing, do not speak for their officers or their organizations. (I strongly disagree with this workers' educator, as this paper will show.)

Ten technicians said that their unions have never actively suggested, financed, or promoted any university research. Nine unions have done so, and are listed below:

<i>Union</i>	<i>Research Project</i>
UAW	"When Labor Votes"—Kornhauser and Misc. studies.
IAM	"The Union Member Speaks"—Hjalmar Rosen and R. A. Hudson Rosen, Institute of Labor and Industrial Relations, University of Illinois—(Prentice-Hall Inc. 1955.) This study was requested by District 9, IAM, St. Louis, in cooperation with the Grand Lodge.
ILGWU	"About three years ago we used some Columbia University people to study problems of retirement of union members in the Cloak Joint Board . . . a book by Columbia was one result (See Tuchman book)."
Communication Workers	Financed two research fellowships at McGill and at the University of Wisconsin—1956. Still in progress. Plus active cooperation (non-financial) in other research at the University of Chicago.
Maintenance of Way Employees	233-page study entitled, "Maintenance of Way Employment on U. S. Railroads," by Dr. William Haber, University of Michigan, and three professors from other universities—1957. Study published in book form by the union. "It was not, however, strictly a university research project."
International Woodworkers	Industrial Relations Center of the University of Minnesota is currently conducting a special research project in the states of Washington and Oregon (by mail) by use of questionnaires.

State, County, and Municipal Employees	Harvard and Temple universities doing current research at request of the union—relating to public employees, etc.
Steelworkers	UCLA studies on Legislative Education and University of Chicago studies of Geriatrics and Misc. studies at other universities.
Teamsters	“Union Solidarity”—Arnold M. Ross, University of Minnesota Press, 1952. Financed jointly by Joint Council No. 13 and the American Jewish Committee.

In addition to the above projects, sponsored by eight international unions and one Joint Council (St. Louis), it has been impossible even to estimate the number of research projects sponsored by unions using one or more professors; by which I mean that there have been dozens not hundreds! This includes numerous historical studies which only by the broadest definition could be called research projects.

In answer to the 5th question about what use would be made of \$25,000 (more or less) for research, the replies show that:

- 2 would have it done by the union staff
- 1 by a university
- 3 by a university and the union
- 19 said that they would make their decision on the basis of the nature of the research, which I interpret as a viewpoint which is not anti-university research.

However, one who checked this fourth alternative evidently is not pro-university because he writes, “While I checked this one because I can conceive of rare instances in which a university technician might be utilized, I believe that unions should attempt to hire their own staffs. If a union wanted a university professor to do a study because of his unique ability, I think that the union should ask him to take a leave of absence from the university and perhaps return after the completion of the study.”

One workers’ educator took the trouble to outline in a covering letter two projects which he hopes the universities will undertake for unions or which the AFL-CIO will subsidize:

1. *Community Relations*—outside of community services, labor has no coherent philosophy of community activities. What about metropolitan government? Studies of a community labor press? A set of standards to evaluate candidates for

city and county offices? What should labor's attitude be toward community developments and expansion? Should the duties of county commissioners and supervisors be radically revised? In short, research and teaching material is needed for better classes in community relations.

2. *Communication*—During the "RTW" campaigns, unionists told me that their greatest problem was—communicating, unionist to unionist and unions to the public. What are the most effective techniques which unions and other organizations have used in communicating? We need more case studies in effective and ineffective communication by both unions and other organizations.

Another respondent said that his union had discussed the possibility of using a university to do research on the six- and eight-hour day problem; at another time, his union talked of making a university-sponsored study of the readership of the union paper. Nothing came of the suggestions.

Twenty-two union technicians said that their unions have no plans for utilizing university research in the immediate future; only three said that their unions are discussing this possibility. Two unions want a study of collective bargaining in their industries. The other reports that it is planning studies of public relations' techniques and political action.

One technician reported that Dr. Detler Bronk, National Academy of Science, feels keenly that labor unions should do much more in subsidizing research—pure and applied.

An indication of the kind of objective research (not university-sponsored) which unions are interested in and will pay for may be found in the research that they have had done by private firms. To my knowledge, this research falls mainly in the fields of organizing and political education. Several unions have had studies made by well-known firms to find out what is wrong with organizing campaigns in a given area and the objective has been to gain background knowledge of the attitudes of the workers in this area. From time to time, CIO-PAC and later COPE have used polling studies during a political campaign to determine what issues are uppermost in voters' minds and to see if there are significant shifts in voting attitudes.

Both kinds of research projects, of course, are geared to specific problems and the unions involved hope to use them to help determine the immediate direction of their program. In some cases, this kind of research would not be possible for a university since it is short-

range and requires immediate carrying out (such as political polls). But in other cases it could be done by universities (such as attitudes toward organizing). Indeed the Union Research and Education Projects Department of the University of Chicago has done such studies and is eager to do more for unions.

There were many "comments on the back," and I record the most pertinent and interesting:

Most demands for union research come on a short-order basis. There is usually not time in advance of deadlines for the full and exhaustive treatment which university researchers feel to be necessary for the protection and advancement of their professional status.

Union executives' interest in the longer term research jobs the academics are best fitted to tackle is at best minimal.

A lot of labor people have complained to me that most social research done in a university setting is useless when it comes to planning definite action programs. I generally agree with them here, but they are referring to basic research that is not designed to solve specific problems or provide definite information in well-defined union problem areas.

It has always struck me as indicative of the low status of social research in the labor movement that not one single labor group has yet hired a sociologist or social psychologist to conduct research. Yet many companies have stables of these people.

Social research poses a lot of very real questions to unions—should it be used, when in most cases—to date—it turns out to be a manipulative weapon to weaken or destroy unions?

On the basis of many interviews with directors of labor program services or labor-management departments of universities, I have concluded that much more research has been done for management (or with a management slant) by the universities than has been done for labor (or with a labor slant) although intended to be as objective as possible in both cases. As far as I know, no study has been made of just how much research of this sort has been done at management's request or has been subsidized directly by management. I recognize that such studies for management may not be supported by general university funds; they are frequently made by professors who have

taken a leave of absence and are supported by a foundation grant. Furthermore, it has not been necessary for management to promote this kind of research; the climate to date explains the greater amount of management-oriented research.

As disproportionate as management-oriented university research in the field of industrial relations has been, this disproportion is even more striking in the field of human relations. One experienced and able director of a university labor research department states flatly, "Nearly all human relations research and educational material has been oriented toward the production problems of management."¹ Again, I claim that the labor movement itself must share a considerable amount of blame for this situation.

It is my hope that, as a result of this emphasis at this IRRA meeting, many more international unions and the AFL-CIO itself, perhaps with the help of NILE, will actively "suggest, finance, or promote" university research in the following (among others) areas:

1. More effective participation of the union members in union activities and better communication between the membership and the leadership. This should be related to democratization of the labor movement and the introduction of built-in techniques for insuring ethical practices.
2. Community activities. In this area, I second the recommendation made by the workers' educator quoted above.
3. A more thorough study than has been made to date of racial and religious discrimination—and fair practices—in unions. The study would be even more valuable if it could give "case studies" of how unions avoid facing up to this issue, as well as studies of cases in which considerable progress is being made.
4. Designing collective bargaining demands.
5. Exactly how many union members are retiring and what is happening to them, in terms of continuing their membership and interest in the local union. This kind of study would be a great help in promoting more interest in the "Preparation for Retirement" educational program which a few unions are now sponsoring but with a minimum of interest on the part of the top leadership.
6. A study of the international unions which are doing the best job of organizing new members, with a sufficient number

¹ For further evidence, consult William Gomberg, "The Use of Psychology in Industry—A Trade Union View," reprint No. 101, Institute of Industrial Relations, University of California, Berkeley, 1958.

of case studies of lost NLRB elections to find out the major reasons for their loss.

Perhaps in no area of union activity has so little objective research been done or so little use made of such "motivational research" as is now available.

7. What kind of unions do the white-collar and technical employees want to join—if any? What are they thinking about unions already organized and wages and working conditions secured for craft and industrial workers who are organized?
8. Readership studies of the best international and local union newspapers related to a study of what kind of community labor papers would be supported by members of town and city AFL-CIO federations, as well as non-labor citizens.
9. The adequacy of present apprenticeship training, as increasingly rapid technological changes are being made in industry (automation). What kind of apprenticeship training do management, the organized labor movement, the present skilled workers (those who have had apprenticeship training), and professional students of the problem advocate for the future?

In conclusion, there was reason for skepticism of and, in some cases, positive opposition to university-sponsored research by the unions. In my judgment, the next ten years should see many international unions promoting and spending tens of thousands to make sure that a great variety of new university research projects will be undertaken. If this is done, it will not only be worthwhile in itself and improve collective bargaining and human relations, in and out of industry, but will be one more way of securing better public relations for the labor movement.

THE QUESTIONNAIRE

Please excuse the form of this letter; we do not have office facilities to prepare the following questionnaire and a personal covering letter separately. Therefore, I am combining the two as a mimeographed job.

As you will know, if you are an IRRA member, I am presenting a union viewpoint on the subject: **VALUE OF INDUSTRIAL RELATIONS AND HUMAN RELATIONS TO LABOR AND MANAGEMENT LEADERS** at the Chicago meeting, Dec. 28-29.

The idea of Jack McConnell, chairman of the session, was that some of us who are consumers of such research should talk about its usefulness. I also understand from him that he takes

for granted that we are discussing primarily university-sponsored research.

I am especially interested in experiences (examples) you may have had with general human relations research, i.e., attitudes and motivations of union members and the like.

I am writing to about 25 research and educational directors of unions—only the most important ones! Please spend thirty or less minutes on this questionnaire and any additional comments in a covering letter. Let me know if you prefer not to be quoted directly. And please return the questionnaire and comments by December 1st, at the latest.

1. Have you found any specific research in the fields of industrial and human relations useful recently? If so, what _____

2. How has it been useful? _____

3. Do you (or does your union) have strong feelings on whether it is desirable to use university-sponsored research in these fields? _____

a) What are these feelings? _____

4. Has your union ever actively suggested, financed or promoted any university research? _____

a) When and how? _____

5. If you had a choice of getting your officers to appropriate \$25,000.00 (more or less) for a research project, would you

- a) Have it done by your staff or employ an additional union technician to do it, under your union's auspices? _____
- b) Have a University do it? _____

- c) Have part of it done by the union and part by the University? _____
- d) Make your decision on the basis of the nature of the research? _____

6. Do you have any plans for utilizing University Research in the future? _____

7. Any other comments? (Put them on the back)

Fraternally yours,
FRANCIS A. HENSON
Director of Education
Great Lakes Territory
International Association
of Machinists

DISCUSSION

LAZAR E. TEFER

International Ladies' Garment Workers' Union

This discussant is somewhat astonished by the amount of attention given at these meetings to the evaluation of academic research activity in the field of industrial and human relations. The task differs somewhat from a critique of specific scientific inquiries. What is sought here is an overview of the entire discipline. I am certain that the interest in this and similar topics does not originate in the subconscious fears on the part of the academic fraternity regarding the worthwhileness of their research undertakings. Nor, I am sure, is this particular query expected to come up with objective response. As Bertrand Russell once noted:¹

Questions as to "values"—that is to say, as to what is good or bad on its own account, independently of its effects—lie outside the domain of science, as the defenders of religion emphatically assert. I think that in this they are right, but I draw the further conclusion, which they do not draw, that questions as to "values" lie wholly outside the domain of knowledge. That is to say, when we assert that this or that has "value," we are giving expression to our emotions, not to a fact which would still be true if our personal feelings were different.

Subjective though our subject is, it does not appear that the main papers met it head on. Professor Yoder, for example, does not even seek to evaluate academic activities in the field of industrial and human relations from the point of view of potential users, labor and management. Rather, his paper seeks to educate those in the academic field regarding the general usefulness of research undertakings: research "presents faculty members in what is perhaps their most favorable light"; it helps to provide a "source of financial support" and helps in view of the typical markups taken over the actual cost of research projects (my term—Professor Yoder speaks of it as "institutional tipping") to tide "many a department over a period of hard times"; it also helps practitioners to improve with practice, assists them in their teaching function, in part at least by enabling them to delegate some of the assignments to graduate students; a valid and useful training device designed to "help students develop a professional attitude and approach to the field." The advice given by Professor Yoder is eminently sound as far as it

¹ Bertrand Russell, *Religion and Science* (1935), p. 242.

goes, even though it unavoidably brings to mind historical works such as Niccolo Machiavelli's "The Prince," and Henry Taylor's "The Statesman" (despite the fact that these works sought to provide advice to somewhat different ends).

Mr. Henson comes closer to meeting his assignment; yet, his approach is limited in scope. Discussion of university-sponsored research of value to labor organizations is confined in the main to a few projects commissioned by particular unions. The value of the particular studies enumerated by Mr. Henson or of other university work is based on the opinions of a small group of persons connected with the labor organizations who are mainly concerned with workers' education. Views were typically not solicited from trade union technicians who take an active part in collective bargaining, adjustment of grievances, and arbitration, or who prepare the needed documentation; who deal with social insurance problems or with the operation of welfare and pension funds; who handle legal and legislative questions or engage in economic, statistical, or accounting investigations. Yet, these individuals, by the very nature of their assignments, represent serious users of university-produced studies dealing with the many-varied facets of labor-management relations. To the extent that university-connected investigators explore industrial relations, they provide union technicians as well as those in the ranks of management (and through them their principals) with useful insights, data, and information for the resolution of pending issues.

One readily appreciates the difficulties which faced the three persons charged with the task of preparing papers for this symposium. The field of inquiry they were to review is exceedingly broad and heterogeneous. The uses of research findings do not readily lend themselves to generalizations; they, too, cover a broad gamut. To the extent that certain research findings are utilized in concrete situations, their particular utility is appraised by their users at the particular time and is not always publicized. An informed opinion, however, be it in labor or in management, is formed after a perusal of the pertinent literature on the subject in question and after evaluation in the light of the knowledge and experience of house technicians and of their principals.

Those who are conducting research in university surroundings should not feel aggrieved by the lack of a clear-cut evaluation of their discipline. Nor should they be particularly anxious to produce results which will be hailed as of immediate value to either

labor or management. This is not to bar undertakings on topics of concern to both labor and management, or to either of them, on the grounds that they are not proper for university-conducted studies. There is room for such inquiries; most likely, they will not deal with problems which require quick resolution or which are highly controversial but rather with those involving long-range considerations. Nor is there any intention to suggest that university personnel should not tackle inquiries which require value judgments. The investigator, in such circumstances, should be conscious, however, of his own explicit or implicit bias, and approach the subject with the kind of modesty with which scholars are expected to be endowed and with a consciousness of the fact that overenthusiasm for one's own work brings on a certain amount of undesirable myopia.

The greatest contribution that may come out of universities is in research activities which do not seek immediate "useful" application. "Perhaps the most important advantage of 'useless' knowledge," writes Bertrand Russell,² "is that it promotes a contemplative habit of mind. There is in the world much too much readiness not only for action without adequate previous reflection, but also for some sort of action on occasions on which wisdom would counsel inaction."

² Bertrand Russell, *In Praise of Idleness* (1935), p. 48.

ARTHUR K. BRINTNALL

The B. F. Goodrich Company

We are supposed to be talking about the value of university-sponsored industrial and human relations research to labor and management leaders. I would like to be somewhat radical for a few moments and stick to the subject. My few remarks will be directed toward the university's role in such research as seen by at least one industrial representative.

It is unlikely that anyone can accurately reflect the opinion of "industry" or "management." In my own case, I probably am biased by my "staff" viewpoint. In addition, I have not conducted a formal survey as Mr. Henson has done among his colleagues in the labor field.

My impressions, however, suggest to me that if a similar survey

were made among business and industrial leaders the results would be remarkably similar to those developed by Mr. Henson. He apparently found that his colleagues considered university research to be:

1. Concentrating on the wrong problems . . . with an apparent lack of interest in what they (labor representatives) consider to be important and practical.
2. Couched in terms that cannot be understood.
3. Lacking in objectivity and subject to the suspicion that the researchers are biased in someone else's favor.

These or similar opinions are held by a substantial number of business and industry people.

I am certain that their opinions are held unfairly. I am sure that university people in the human relations research field are motivated by desires to solve important and practical problems, to communicate clearly with practitioners, and to work with complete objectivity. The important thing, therefore, seems to be that university research leaders need to understand why they are failing to establish good working relationships with labor and industry people.

I believe that there are three major reasons why university research has been less valuable to labor and to industry than it might be:

1. The communication of research findings is too often couched in terms designed to impress others with the erudition of the researcher. Rarely is there a careful attempt to reduce conclusions to anything approaching lay language. I suspect that this disposition to overcomplicate research reports is in part due to embarrassment over the meagerness of the results. However, if we have little in the way of practical results to communicate, we will make few friends by not admitting it.
2. The universities have failed to develop "technicians" who are skilled in the understanding of research techniques and interpretations and who can make the necessary translations to the practical people of labor and industry. The field of human and industrial relations research badly needs the training of a large number of people who bear the same relationships to the social sciences as the engineers do to the physical sciences.
3. There is a tendency, not universal but great enough to be impressive, to identify research and research proposals as being related to industrial problems when in fact the relationship is so remote as to be nearly invisible. This practice seems to occur

in connection with proposals for financial assistance from industry or from industry-supported associations. While this is far from a universal practice it is frequent enough to cause concern and to contribute to a certain lack of confidence in the researcher's objectivity.

In summary it appears to me that the tremendous potential benefit that can come to industry and labor from university research and researchers is not being realized for several specific reasons. It is encouraging to see that these obstacles are all matters that can be overcome, but it must be noted that their correction lies almost entirely within the control of the universities.

Part IV

**PRESENT ISSUES
IN UNEMPLOYMENT INSURANCE**

PUBLIC POLICY IMPLICATIONS OF UNEMPLOYMENT INSURANCE FINANCING

GEORGE F. ROHRLICH *

I. THE TASK OF PUBLIC POLICY AND UNEMPLOYMENT INSURANCE

Public policy must aim at finding solutions to economic problems by harnessing, rather than impairing, the basic drives which make our economic system tick. As far as they concern us here, the public policy objectives are taken to be stability and growth. The motivational or morale factors which are fundamental to our economic system are probably three: (1) private incentives to gainful work; (2) differential rewards; and (3) the avoidance of widespread hardships in the way of unmet basic needs. In the main, these were the considerations which—explicitly or otherwise—gave birth to the American social security system and which have molded its development, most especially that of our social insurances.

Unemployment insurance, like most of our national social security institutions to date, is an income maintenance program. Its basic function, whether one views it from the vantage point of the economy and society at large (“market insurance”—Slichter) or from the individual worker’s point of view (“income insurance”—Larson), is to bridge the temporary gap in the income flow between the involuntary loss of one productive activity and the start of another. Like other social security programs, and more so than most now existing in this country, it combines with this main function important, if subsidiary, service functions. Taken in the broader context of the entire employment security program, unemployment insurance should be instrumental in locating jobs and matching them with suitable job seekers. Some would ascribe to it yet another ancillary function, namely to help in stabilizing employment.

From a public policy angle, anything conducive to making this program achieve its ends better or to a more far-reaching degree

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would appear to be desirable as long as it did not go against the ground rules, i.e., did not violate our accepted economic mores as defined above. And vice-versa.

II. THE PUBLIC POLICY IMPLICATIONS OF A PSEUDO-ISSUE

Fear of the possible "inflationary impact" of unemployment insurance benefit payments, and of concomitant tax measures necessary to finance them has more than once thwarted attempts to strengthen unemployment insurance as a public policy tool. What is the basis and justification for this concern?

With regard to the payment of unemployment insurance benefits, the greatest impact occurs during periods of business decline, industry shifts, or prolonged retooling periods. In any one of these situations large numbers of workers are thrown out of work, and unemployment is apt to last a long time. Consequently, maximum duration provisions come into play on a wide scale, and average duration of benefit payments typically lengthens. The same is true of maximum benefit amount provisions. As high-paid workers with regular labor force attachment are more likely to become unemployed, average benefit payments per recipient typically rise.

These situations do not portend or afford momentum to inflationary developments. On the contrary, they are the very ones in which unemployment insurance is the single most important "automatic stabilizer" to keep the bottom from dropping out. If any criticism can be levelled against it on general economic and fiscal-policy grounds, it can only be that its compensatory impact is insufficient to halt any deflationary spiral which may be in the making. The moment recovery starts, any possible reinforcement of "inflationary" tendencies is precluded in that the right to draw unemployment insurance benefits terminates just as soon as the worker obtains a job—if not sooner.

But what about those unemployment insurance benefits paid in periods of high employment, be it on account of ever-present frictional unemployment, or to seasonal workers and others with merely a marginal attachment to the labor force? May not these exert an inflationary effect?

Quantitatively speaking nationwide unemployment insurance payments in years of substantially full employment have been appreciably below-average—approximately as much below average as unemploy-

ment itself.¹ While it could be argued that, in terms of inflationary forces, magnitudes of a few hundred million dollars per year could be regarded as negligible anyway, the question why there is not a sharper reduction in benefit disbursements during prosperous years is a pertinent one. In raising this question, Professor Richard Lester of Princeton recently advocated, among other things, a stricter definition of eligibility which would eliminate payments to beneficiaries whose substantial attachment to the labor force can be, and is being questioned—chiefly by reason of the exclusively seasonal and short-term character of their employment.² To do so would further reduce, if only in small measure, those unemployment insurance disbursements without clear and pronounced relationship to the business cycle. What about the irreducible benefit load?

Perhaps the best way to put this in proper perspective is to raise two complementary questions: In a free dynamic economy, such as ours, giving rise to some unemployment at all times, even in prosperity, just how meaningful is it to argue “inflationary effect” in connection with a compensatory income maintenance benefit geared to “replacing a portion of the wage loss” at a rate which will cover the “non-deferable expenses” of an unemployed worker and his family? Would not the alternative public policy be to let the social costs of economic change, as well as any downward adjustment in deflationary periods be borne entirely by those unlucky enough to be thrown out of jobs? Should such be the corrective for wage rigidities and other economic inelasticities?

¹ Over the ten years 1948 through 1957 the average annual benefit disbursement for the Nation as a whole (expressed as a ratio to total wages paid in employment covered under the unemployment insurance program) was one percent. In the lowest-payment years during that decade, this ratio was .7 percent in 1951 and 1953. By comparison, the annual average rate of total unemployment for that ten year period was 4.3 percent of the civilian labor force while for 1951 and 1953, the lowest years in this series too, the ratios were 3.3 percent and 2.9 percent respectively. Thus, the 30 percent variation in unemployment benefit disbursements falls in between the 23 and 33 percent variation respectively in unemployment.

² See forthcoming Proceedings of the Conference on Social Security held at Michigan State University, East Lansing, November 18 and 19, 1958. Other students in the field have expressed similar opinions, not primarily with a view to increasing the counter-cyclical impact of the program, but in order to make the program more consistent with its objectives and to remove areas of controversy. The corollary to this argument, of course, is that, in order to achieve both wider counter-cyclical swings in benefit payments and fuller reimbursement of wage losses, the artificially low limits on the amount of weekly benefits for the regularly attached, high-wage earner would need to be substantially loosened up.

Apprehension as to the possible inflationary effect of taxes, or increases in taxes, necessary to finance unemployment insurance benefits rests on the assumption that these, as other costs of production, are passed on by employers to consumers in the form of higher prices. Our extremely limited knowledge about the incidence of the payroll tax has often been pointed out.³ What should be recalled in the present context is our experience with unemployment tax rates. The complaint of most informed observers about the working of the unemployment tax has been that, generally, State taxes were permitted to fall to extremely low rates over periods of time when higher taxes could have been paid with comparative ease. Conversely, increases in the tax rate, all too frequently, have then become unavoidable at times, such as the recent past, when from a counter-cyclical point of view they seemed most undesirable.⁴ Yet, it is precisely at these times of buyers' markets that the passing on of higher costs is least likely. I shall return to the problem of unemployment insurance taxation at a later point.

III. A REAL ISSUE—IN WAIT FOR SUPPORTING EVIDENCE

Another roadblock of no mean proportions which has kept some very pressing public policy issues pertaining to the development of the unemployment insurance program, and finances in particular, from being discussed on their merits has been the concern over excessive costs. A special variety of this contention, the bird-in-hand argument of "a tax saving this year," has proved time and again its superior persuasiveness over most any other consideration, including various tax advantages in the long run. The implication of undue burdens certainly warrants public policy concern if and when borne out by facts.

Back in the 'thirties, when our unemployment insurance program was first conceived, the Committee on Economic Security had little information to go on in determining the probable cost. As the Committee's Director of Research, Professor Edwin E. Witte, has relayed it, three percent of payrolls was chosen as the proper tax rate because it was felt at the time that any program worth having could not

³ See e.g., Clinton Spivey, *Experience Rating in Unemployment Compensation*, University of Illinois Bulletin, Vol. 56, No. 14, Sept., 1958, p. 80ff., and the passages he quotes from Sumner H. Slichter, Eveline M. Burns, and others.

⁴ Effective April 1, 1958, at the trough of the recession, Oregon, and effective Jan. 1, 1959, Pennsylvania had to suspend tax rate reductions by reason of reserve depletion. By contrast, the average tax rates in these States for the period 1948 through 1957 were 1.4 percent and 1.2 percent respectively.

be financed by lesser rates. The base on which the tax was then levied was *total* wages, rather than any limited amount such as the first \$3,000, earned in covered employment in any one year.

In light of this one-time resolve, and keeping in mind the tax developments during this period in the related social insurance programs, notably old-age, survivors' and disability insurance, it is revealing to review the average rates at which State taxes have actually been collected from employers to finance unemployment insurance over the past twenty-one years (see table below).

Average employer contribution rates expressed in percent of taxable wages and of total wages, 1938-58

Year	Number of states with experience rating	Rate as percent of <i>taxable</i> wages		Rate as percent of <i>total</i> wages	
		All states	All experience rating states	All states	All experience rating states
1938	1	2.75	2.74	2.69	2.74
1939	1	2.72	2.09	2.66	2.09
1940	4	2.69	1.39	2.50	1.31
1941	17	2.58	2.18	2.37	2.03
1942	34	2.19	1.82	1.98	1.66
1943 ¹	40	2.09	1.78	1.86	1.65
1944 ¹	42	1.92	1.59	1.67	1.52
1945 ¹	45	1.71	1.56	1.50	1.47
1946 ¹	45	1.43	1.07	1.24	1.20
1947	50	1.41	1.40	1.19	1.19
1948	51	1.24	1.24	1.01	1.01
1949	51	1.31	1.31	1.07	1.07
1950	51	1.50	1.49	1.18	1.18
1951	51	1.58	1.58	1.20	1.20
1952	51	1.45	1.45	1.08	1.08
1953	51	1.30	1.30	.93	.93
1954	51	1.12	1.12	.79	.79
1955	50 ²	1.18	1.18	.81	.80
1956	50	1.32	1.32	.88	.88
1957	50	1.31	1.31	.85	.85
1958 ³	50	1.4	1.4	.9	.9

¹ Rates include effect of war-risk contributions.

² Alaska abolished experience rating from 1955 on.

³ Estimates.

Averaging the annual employer tax rates for the three five-year periods and for the most recent period of six years, the tax declined during the first five-year interval from 2.7 to 2.5 percent for all employers and to 2 percent for all rated employers; during the second five-year interval to 1.5 and 1.4 percent respectively; during the third five-year interval to 1.1 percent for all employers (by then all States had experience rating in operation); and during the most recent six years to .9 percent of total payrolls.

To arrive at the total employer tax burden under this program about 2 tenths percent (equivalent to 3 tenths percent of taxable wages) must be added to the last figure. Even so, the downward trend of employer tax rates is striking. When one considers that, in addition to employer taxes, unemployment insurance taxes upon employees used to be levied in as many as nine States, while today only three States levy an employee tax for unemployment insurance purposes, surely the total financial burden for unemployment insurance in this country has been kept far below earlier expectations. According to some recent estimates, this cost compares with the other social costs as follows (all figures in percent of payroll for 1957):⁵

<i>Program</i>	<i>Percent</i>
Statutory payments (including unemployment insurance)	3.9
Pensions, insurance, etc.	6.8
Paid rest periods	2.3
Other time off	6.9
Bonuses, awards, etc.	1.9
Total	21.8

On the average, then, the cost of unemployment benefits has been about one-twentieth of the non-wage portion of the variable costs of production. Does this represent the degree of importance public policy should assign to this, as compared with other social and "fringe benefit" programs?

Approaching the same problem from the opposite end, one might ask: How much unemployment insurance would a tax burden such as that contemplated at the outset buy for us today? The answer must necessarily be in somewhat general and approximate terms. I believe to be safe in saying that in a year like calendar year 1957 or fiscal year 1958, or for a decade such as that just concluded, a combined State and Federal tax equivalent to three percent of total wages paid in covered employment would have sufficed to finance, on a national basis, the most far-reaching among several proposals to liberalize unemployment insurance benefits introduced in this Congress (e.g., S. 3244—85th Congress, 2nd session—the Kennedy bill) plus dependents' allowances conforming to the most generous provisions of this type currently in effect under State law.

⁵ Source: *Fringe Benefits—1957*, U. S. Chamber of Commerce, Washington, D.C., 1958, p. 9. The figures shown represent only the costs to employers.

Without prejudging the question of how much of the Nation's resources should be committed to this purpose, it is clear that at least the original allocation leaves plenty of leeway for program development in that average cost experience with unemployment insurance *for the Nation as a whole* has proved far less than anticipated. While this statement should bring out the relative remoteness of a national problem of "excessive costs," its italicized portion should, at the same time, call attention to an important proviso relative to cost experience on a State-by-State basis. Of this more later.

IV. PRESENT ISSUE NO. 1: WHAT KIND OF UNEMPLOYMENT INSURANCE ARE WE PREPARED TO UNDERWRITE?

There can be no question but what the lower-than-expected taxes have, at least in most respects, purchased for workers a far better-than-expected program: reduced waiting periods, substantially longer duration of benefits, and the development of family allowances in selected States are some of the more significant instances of the gains made in this period. Clearly on the other side of the ledger is the growth of a never-to-be foreseen gamut of disqualifications which have reduced the scope of the beneficial function of unemployment insurance in purely economic terms as an assured "first line of defense" against involuntary unemployment for whatever cause.

As regards the extent of wage-loss compensation, the target of the program's Founding Fathers was to have benefits make up about 50 percent of that loss for the recipient. Statistics from the early years of operation show a near-attainment of this goal. For those drawing less than the maximum weekly benefit amount this was sought to be achieved by means of the design of the benefit formula so as to yield that proportion at least for the full-time worker. For those drawing benefits at the maximum rate, the compensation ratio was about 43 percent. At present, the latter group, which has become an ever greater proportion of all claimants, draws benefits at a compensation ratio averaging nearer one-third.

Taking into account the fact that in 1939 wages and salaries at the earnings levels prevailing at the time were virtually tax-free while at present wage and salary earners, notably those qualifying for maximum benefits when unemployed, pay substantial taxes on their work income, the comparability of these ratios becomes clouded. However, the findings of several recent beneficiary surveys bring out more clearly than does any more or less arbitrary compensation ratio the

extent to which current benefit amounts fell short of the mark—if that mark be defined as the capacity to meet the non-deferrable expenses of the recipient individual or family unit, as the case may be.⁶

This, to me, raises the number-one *real and present* public policy issue with regard to the financial and the broader economic aspects of unemployment insurance. The question is, what kind of, and how much unemployment insurance?

Ours is an economy relying heavily on current consumption which, in turn, is sustained in large measure by the widespread resort to budget-plan and other installment buying, notably of essentials such as housing, home improvements and transportation, and even clothing, foods (under the various frozen food plans), and medical and hospital care (through insurance and prepayment plans). In light of this characteristic, does it make sense, on the one hand, to speak of “market insurance” and “income insurance,” (to say nothing of the maintenance of skills, and the free choice of employment commensurable with past experience and qualifications), and, on the other hand, so to design our unemployment insurance as to short-change both the economy and a large segment of workers, typically the highly skilled and high-earning family man, of the attainment of this goal?

One rather novel and imaginative proposal was recently advanced by Professor John Kenneth Galbraith of Harvard. Leaving in existence the present statutory limitations of unemployment insurance, he would superimpose upon the State programs a Federal program called Cyclically Graduated Compensation (CGC) operative in times of high and prolonged unemployment and only for the duration of such employment. This would assure the replacement of from two-thirds to four-fifths of the income loss for as long a period as a worker remained unemployed and the depressed conditions continued.⁷

From a purely economic point of view Professor Galbraith's proposition seems quite ingenious. The most thoughtful critical comment I have heard has come from Professor Lester who feels that to switch back and forth not only between two standards but between two basic

⁶ See e.g., Mabel Hopper “How Unemployment Benefits Meet Family Needs,” *Employment Security Review*, November 1958, p. 3 ff. Professor Wilbur J. Cohen, of the University of Michigan has recently suggested that rather than seeking to establish as adequate any particular preconceived wage-loss compensation ratio, a more realistic measure of adequacy might be obtained by reference to what the people themselves consider as the essential minimum. (See forthcoming Proceedings of MSU Conference on Social Security referred to earlier.)

⁷ John Kenneth Galbraith, *The Affluent Society*, Houghton Mifflin (Boston), 1958, Chapter XXI.

philosophies that far apart would completely defy popular understanding and would undermine workers' morale.⁸ To use the frame of reference I set forth at the outset, wise judgment seems called for to determine whether Professor Galbraith's contention that the "surviving difference" between income through work and income through CGC which to him "represents the continuing concession to the Puritan principle that leisure should be less amply rewarded than work,"⁹ is significant enough to make this solution acceptable as harnessing rather than impairing the basic drives which make our economic system tick.

PRESENT ISSUE NO. 2: HOW DO WE WISH TO FINANCE UNEMPLOYMENT INSURANCE?

Second, but by no means secondary in the urgency of their claim to thorough reconsideration from the vantage point of public policy are the main elements of rate-making, tax, and reserve policies in current use in our Federal-State unemployment insurance system.

A. *Equity in Rate Making*

With few exceptions, only employers pay unemployment taxes, and their rates are determined on the basis of any one of four or five different experience rating systems purporting to measure individual employers' comparative experience with (the risk of) unemployment.¹⁰ To assure equity between employers, each State must have its experience rating system approved by the Federal government. Among all the conformity and compliance questions arising out of the operation of the Federal-State program, issues in experience rating represent by far the most numerous single category. This is not the place to indulge in a debate on the merits and demerits of experience rating. One important question, however, cannot be dodged forever: how meaningful is the concept of equity as between employers in light of the fact that, depending on which one of the several experience rating methods a State chooses, substantially different rates are likely to ensue? These rates may differ widely as between individual employers, groups of employers and industries in the same State over the same period

⁸ Lester, *loc. cit.*

⁹ Galbraith, *op. cit.*, p. 300.

¹⁰ Alabama, Alaska and New Jersey currently levy small employee contributions. In Alaska, Oregon, Rhode Island, and Washington, employer contributions are currently levied at a flat 2.7 percent of payrolls.

of time and based on exactly the same experience with unemployment—nothing having changed except the method of rating and the tax rates it produces.¹¹

B. *Counter-cyclical Variation of Unemployment Insurance Taxes*

With the exception of one single State, Wisconsin, no conscious effort has been made to levy the revenues necessary to finance unemployment insurance benefits in a truly counter-cyclical fashion. While benefit payments, especially of recent years, have shown sizable counter-cyclical bulges as for example in the current year when aggregate payments are likely to be of the order of four billion as against last year's \$1.7 billion, the variations in aggregate tax levies have not been impressive.¹² Ways of drastically changing this by means of a simple Federal requirement—which might perhaps take the place of existing experience rating requirements—whereby substantial and repeated tax reductions during a recession would be authorized *provided* ample reserves are accumulated during periods of low unemployment could well be worked out once public policy in this regard is determined to encompass such a solution.

C. *Interstate Aspects of Cost and Reserve Needs*

In an earlier portion of this paper, our national cost experience with unemployment insurance was described as below expectations and an upper limit of the estimated average cost for the Nation as a whole was quoted for some of the more comprehensive liberalization proposals made to date. A caution was attached to the effect that the cost impact on individual States has varied greatly and might vary even more if such proposals be adopted. Over the decade 1949–58, State cost rates have ranged from .5 to 3.6 percent of taxable wages. It is this variation in benefit cost experience between States which calls for study and—if it is to grow in the future, as seems possible—perhaps for remedial action

¹¹ This has been demonstrated e.g., in a recent study made by the Illinois agency (pursuant to a legislative mandate) comparing employer tax rates computed on the basis of two different experience rating systems. See Illinois Department of Labor, Division of Unemployment Compensation, *Study of Alternative Systems of Experience Rating* (Preliminary Report), 1957.

¹² Professor Clinton Spivey in his study on experience rating cited above has found in at least one State, New Jersey, a good counter-cyclical correlation between the combined taxation and disbursement effects on the one hand and employment (expressed in payrolls) on the other. See *op. cit.*, p. 65.

which would enhance the financial basis of this Federal-State program without jeopardizing its continued adjustment to changing needs.

Expressed in a different way, the degree of reserve accumulation which is required in a Federal-State system in which each State is to be completely self-financing, at least over the long run, is bound to be greater, *for any given benefit schedule*, than it would be if some measure of Federal equalization or pooling were provided to avoid excessive burdens upon individual States.

VI. THE LIMITATIONS OF UNEMPLOYMENT INSURANCE

Important as it is in appraising the capacity of any social program to explore the ways of deriving from it the greatest amount of good in terms of the given public policy goals, a complementary task is to probe its limitations and to guard against undue expectations.

This leads me to formulate as my last important policy implication one which as yet appears to have escaped widespread notice, let alone aroused concern. Yet, such seems to be called for as we look beyond the next year or two. I am referring to the problem of rapid technological change entailing widespread obsolescence of skills and ensuing unemployment of possible long duration, with most uncertain prospects of re-employment for those affected. Detroit with its reported 100,000 or more hard-core displaced workers may be but a foreboding of things to come. I believe that standing as we are on the threshold of an age of atomic energy we ought to be prepared for shifts in the "industrial arts" and in manpower allocation no less far-reaching than those encountered in preceding periods of comparable change from one basic energy source to another, e.g. from steam to electric power.

The problems of employment and unemployment which such a basic changeover is likely to engender strike me to be of a nature and magnitude far different from those to which this program as we know it can provide an answer. My negative proposition not to overtax our unemployment insurance system either in our expectations of its performance or in its financial burden carries with it another, positive, inference for public policy debate. This is the problem of formulating a retraining program and other related programs broad and far-sighted enough to anticipate those tasks with which neither unemployment insurance nor the traditional job placement program can be expected to cope.

VII. SUMMARY AND CONCLUSIONS

To sum up, then, I offer for discussion as some of the most important public policy implications of unemployment insurance financing the following:

1. The need for a clear line nailing the alleged inflationary influence of unemployment insurance benefits or taxes once and for all as a red herring;
2. clarification of another perennial obstacle in the way of sound program development hailing under the slogan of "excessive costs";
3. constructive evaluation of just how far the ground rules of our economic system permit unemployment insurance to serve both as "market insurance" for the economy and as "income insurance" for the individual in making unnecessary severe short-run adjustments in either the national or the family economy;
4. re-evaluation of the rate-making, tax, and reserve policies with a view to achieving equity, counter-cyclical financing and keeping tax and reserve requirements from rising unduly high;
5. a bold and far-sighted approach to those unemployment problems likely to be engendered by impending changes in the basic energy sources for our economy which may transcend the capacity of unemployment insurance both financially and in other respects.

THE ROLE OF UNEMPLOYMENT COMPENSATION IN DEPRESSED AREAS

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The past year has witnessed widespread Congressional interest in three basic problems relating to unemployment: (1) means of combatting the recession, (2) extension and improvement of unemployment compensation, and (3) aid for chronically depressed areas. The recession has undoubtedly been the prime mover in provoking legislative concern with these other issues, for it highlights the problems of structural unemployment and tests the adequacy of our system of compensation. The plight of depressed areas has been widely recognized at least since World War II, and deficiencies in our unemployment compensation system have been scored by students of social security for many years. Recognizing the tendency to legislate in emergencies, however, the advocates of change in these fields have used the cyclical crisis as a fulcrum for action on what are essentially long-run problems.

As in so many other recent public debates, it is noteworthy that the issue of Federal versus State rights enters into the campaigns both for improvement in unemployment insurance and for aid to chronically labor-surplus areas. Whereas the opponents of these measures stress the primacy of State and local responsibility, their supporters feel that adequate solutions can be found only at the Federal level.¹ Just as the Federal government has now assumed major responsibility

¹ For proposed Federal action on unemployment insurance, see Richard A. Lester, "Issues in Unemployment Insurance," Social Security Conference, University of Michigan and Wayne State University (Nov 18-19, 1958), pp. 11-14; also his testimony and that of other economists in *Unemployment Compensation*, Hearings before the Committee on Finance, U. S. Senate, 85th Cong. 2nd Sess. (May 13-16, 1958), pp. 275-87. Recent proposals for national action on depressed areas are offered in Sar A. Levitan, *Federal Assistance to Labor Surplus Areas*. A report prepared at the request of the chairman of the Committee on Banking and Currency, U. S. House Representatives, 85th Cong. 1st Sess. (April 15, 1957), pp. 13-16; William H. Miernyk, *Depressed Industrial Areas—A National Problem* (Washington: National Planning Association Pamphlet 98, 1957), pp. v-vii, 37-52; Miernyk, "British and American Approaches to Structural Unemployment," *Industrial and Labor Relations Review*, Vol. 12 (Oct. 1958), pp. 12-19; "Distressed Areas—A National Problem," in *Labor's Economic Review* (Washington: AFL-CIO, April 1957). Opposing views are found in Levitan, *op. cit.*, pp. 17-18; Guy Waterman, "Adjustment to Localized Unemployment," in *American Economic Security* (Washington: U. S. Chamber of Commerce, Nov.-Dec. 1956), pp. 25-39.

for the attack on recession, a national rather than wholly sectional approach is being urged for depressed areas and improvements in the unemployment insurance system.

It is the purpose of this paper to examine the adequacy of unemployment compensation in chronically depressed areas—in good times and bad—and to explore means by which unemployment benefits may contribute to the solution of the problems found in these areas.

UNEMPLOYMENT IN DEPRESSED AREAS

An understanding of the causes and patterns of unemployment and mobility in depressed areas is essential in evaluating the role of unemployment compensation. Although a variety of local and Federal attacks on the problems of localized unemployment have been made for a number of years, the 1957-58 recession found the situation little improved. Persistently high rates of local unemployment in years of national prosperity have reached even higher levels in periods of economic downturn. Somewhat in desperation, eyes have turned increasingly toward a more comprehensive Federal program of assistance. But, given the peculiar character of the employment problems in depressed areas, there are serious questions concerning the probable effectiveness of the most commonly proposed solutions.

Definitions. Eligibility for inclusion in the category, "industrial depressed area," is usually based on the labor market area's record of unemployment as a percentage of its labor force over a period of time. It is necessary to distinguish between temporarily high rates of unemployment stemming from short-run factors, and chronically high rates based on persistent maladjustments. The Douglas bill, passed by the 85th Congress and vetoed by President Eisenhower, provided three different criteria for eligibility for Federal aid:²

1. Twelve percent unemployment for 12 months preceding the application for aid; or
2. Eight percent during at least 15 months of the 18-month period preceding application; or
3. Six percent during at least 8 months in each of the 2 years preceding the application.

The Bureau of Employment Security prepared a tentative list of areas eligible for assistance. In January 1957, these included 20 of 149 major labor market areas and 43 smaller areas. By March 1958, it

² Levitan, *op. cit.*, p. 25.

was estimated that about 70 industrial areas spread over 20 states would be eligible for assistance. Approximately 4.8 million workers, representing 7.2 per cent of the national labor force, were located in these areas.³ Obviously, not all industrial areas classified as "areas of substantial labor surplus," (i.e., with unemployment exceeding 6 per cent of the labor force) by the Bureau of Employment Security are included in the potentially eligible list. In May 1957, when the economy was still at relatively high levels, 21 major areas and 59 smaller areas were classified as having a substantial labor surplus. Although they represented only 6 per cent of the U. S. labor force, they accounted for 13 per cent of national unemployment. Whereas 1 out of every 25 workers in the country as a whole was unemployed at this time, 1 out of every 10 workers in the labor-surplus areas was unemployed.⁴ Many smaller areas, with under 15,000 population, are not included in the Department of Labor list.

Depressed agricultural areas present a more difficult problem of definition. Here the basic concern is with underemployment rather than unemployment. Members of the farm labor force are seldom completely without employment, and yet their services are often utilized incompletely and inefficiently. Unfortunately, there is no reliable measure of this "disguised" unemployment.⁵ The objection to using standard concepts of unemployment in such areas can be seen in the fact that censuses of population and unemployment have consistently reported a lower level of unemployment (as customarily measured) in even the lowest-income rural counties than in urban areas. Legislative proposals for Federal aid to these areas have been necessarily vague in defining eligibility requirements. They are couched in such imprecise terms as conditions of "excessive low income" and "substantial and persistent underemployment."⁶ The Douglas bill specifies aid for the 300 rural counties "with the largest number and per cent of low-income farm families" and with "substantial and persistent unemployment." The Committee selected areas which might be considered eligible for Federal assistance by examining lists of coun-

³ *Area Redevelopment Act*, Report of the Committee on Banking and Currency to accompany S. 3683 (April 28, 1958), p. 10.

⁴ *Legislation to Relieve Unemployment*, Hearings before The Committee on Banking and Currency, House of Representatives, 85th Cong. 2nd Sess. (April 14-30, May 1-22, 1958), p. 1216.

⁵ Louis J. Ducoff and Margaret Hagood, "The Meaning and Measurement of Disguised Unemployment," in *The Measurement and Behavior of Unemployment*. A conference of the Universities-National Bureau Committee for Economic Research (Princeton: Princeton University Press, 1957), pp. 155-66.

⁶ Levitan, *op. cit.*, p. 29.

ties with the lowest levels of living for farm families and with the highest proportion of commercial farms having gross sales of less than \$2,500. The 315 counties which appear on both lists are presumed to be eligible for aid. These counties are located in 16 states, primarily in the Southeast, and it is estimated that they include 7 million persons, over 4 per cent of the United States population.⁷

Chronic Maladjustment. The most persistent cause of depressed industrial areas is the decline of employment opportunities in a single industry upon which the local area is dependent. Where technological change and shifts of plant location also occur, the seriousness of unemployment is aggravated. These conditions explain the prevalence of depressed areas in the coal fields of Pennsylvania, West Virginia, Kentucky, Illinois and Virginia; in the former locomotive center, Altoona, Pennsylvania; in the textile regions of New England and South Carolina; in the mining areas of northern Michigan and Wisconsin.

Many depressed rural areas have never developed a sufficient economic base to support population growth. Their problems stem from the decline in agricultural employment, the uneconomic size of farming units, the depletion of natural resources, the absence of non-farm employment, and the lack of vocational training facilities. In industrial and rural areas, depression breeds further depression as the decline in employment causes a loss of young manpower and a deterioration of community facilities.⁸

Extent of Unemployment. The persistence and seriousness of the unemployment stemming from these causes has been well-documented in extensive hearings held before Congressional committees and in data provided by Federal and State agencies of employment security.

⁷ *Area Redevelopment Act*, pp. 10, 16.

⁸ Lengthy discussions of the causes of chronic local unemployment are contained in Levitan, *op. cit.*, Miernyk, *op. cit.*, Waterman, *op. cit.*, as well as in the detailed Congressional hearings held since 1955: *Causes of Unemployment in the Coal and Other Domestic Industries*, Hearings before the Subcommittee to Investigate Unemployment of the Committee on Labor and the Public Welfare, U. S. Senate, 84th Cong. 1st Sess. (March 7-29, April 12-20, 1955); *Low-Income Families*, Hearings before the Subcommittee on Low-Income Families of the Joint Committee on the Economic Report, 84th Cong., 1st Sess. (Nov. 18-23, 1955); *Area Redevelopment*, Hearings before the Subcommittee on Labor of the Committee on Labor and the Public Welfare, U. S. Senate, 84th Cong., 2nd Sess. Pt. I (Jan. 4-26, Feb. 3-24, 1956) and Pt. II (Feb. 24-27, March 22-29, Apr. 26, 1956); *Area Redevelopment*, Hearings before a Subcommittee of the Committee on Banking and Currency, U. S. Senate, 85th Cong., 1st Sess. (Mar. 6-14, Apr. 9-15, May 8-15, 1957); *Legislation to Relieve Unemployment*, Hearings before the Committee on Banking and Currency, H.R., 85th Cong., 2nd Sess. (Apr. 14-30, May 1-22, 1958).

Only a few examples can be cited here. Table 1 indicates the chronic character of unemployment in Pennsylvania's coal and railroad centers. The average unemployment in these areas consistently and substantially exceeded the State average in periods of national full employment as well as in periods of recession. Unemployment in the 12 surplus-labor areas combined was a larger ratio of the State total in the prosperous times of 1953 than in the downturn of 1954.

Nine surplus-labor markets in Kentucky represented about one-fifth of the State's total labor force in 1955. The percentage of the labor force unemployed in the nine areas combined, compared to the rest of the State, was as follows: ⁹

UNEMPLOYMENT AS A PERCENTAGE OF THE LABOR FORCE				
	1954	1955	1956	1957
Nine depressed areas	18.7	15.4	10.2	10.7
Rest of the State	7.7	7.3	6.5	N.A.

Three surplus-labor areas in New Jersey, representing 11 per cent of the State's population, accounted for an average of 16 per cent of total State unemployment in the period 1954-57.¹⁰

Estimates of unemployment in depressed rural areas go even higher. In April 1958 it was estimated that in 10 rural counties in Kentucky, there were more unemployed than employed workers. In 28 depressed rural counties, over 45 per cent of the workers were unemployed.¹¹ The full extent of depression can be gauged only by the low-income status of the population and outward migration. Ample evidence of these developments has been presented in the Hearings.¹²

Remedies. The traditional approach to a solution of these problems has been through "operation bootstrap"—some form of local community redevelopment project designed to attract new employment opportunities. Ranks are closed, and the local citizens cooperate in raising funds to purchase land for lease or grant to new enterprises. New facilities may also be built for this purpose. The efforts are usu-

⁹ *Legislation to Relieve Unemployment*, pp. 838-47.

¹⁰ *Ibid.*, p. 871.

¹¹ *Ibid.*, p. 41.

¹² See, especially, *Low-Income Families*, pp. 61, 364-5.

TABLE 1
*Average Unemployment and Per Cent of Labor Force Unemployed in Areas of
 Substantial Labor Surplus, Pennsylvania, 1953-1957*

Labor market area	Average number unemployed					Average per cent of civilian labor force unemployed				
	1953	1954	1955	1956	1957	1953	1954	1955	1956	1957
State total.....	187,900	402,200	322,500	251,000	276,900	4	9	7	5	N.A.
Major areas										
Altoona.....	3,150	8,800	6,100	4,850	5,600	6	16	11	9	10
Johnstown.....	8,000	17,100	13,500	8,650	6,500	8	20	13	9	7
Scranton.....	10,750	14,800	14,700	11,100	11,400	10	14	14	11	11
Wilkes-Barre-Hazleton.....	13,600	22,200	19,450	18,000	16,200	9	15	13	13	12
Erie.....	3,600	8,500	7,200	4,900	6,100	N.A.	9	8	5	6
Smaller areas										
Berwick-Bloomsburg.....	700	1,600	1,750	1,800	1,950	3	8	8	9	9
Clearfield-DuBois.....	3,450	5,350	4,700	2,750	2,350	10	15	13	8	7
Lewistown.....	N.A.	2,100 ^b	1,700	1,550	1,500	N.A.	10	8	7	7
Lock Haven.....	750 ^a	2,100	1,500	950	1,400	5	14	10	6	9
Pottsville (Schuylkill Co.).....	11,200	15,650	14,150	15,050	10,900	14	19	17	18	14
Sunbury-Shamokin-Mt. Carmel.....	5,900	10,250	7,450	5,300	4,850	8	15	11	8	8
Uniontown-Connellsville.....	6,100	12,300	10,500	7,300	6,800	12	23	21	16	15
12 surplus areas combined.....	67,200	120,750	102,700	82,000	75,550	9	16	14	11	10
Remainder of state.....	120,700	281,450	219,800	168,800	201,350	3	7	6	4	5

^a Data relate to March 15, 1953.

^b Data relate to January 15, 1954.

Source: Bureau of Employment Security, Pennsylvania Department of Labor and Industry.

ally accompanied by widespread promotional campaigns. State activities often support these local enterprises.¹³

Although the Federal Government has eschewed a central, coordinated program to aid depressed areas, it has developed a number of programs designed to aid local efforts. These include technical assistance, urban renewal and planning, community facilities assistance, aids to small business, Federal procurement, rapid tax amortization, surplus food distribution, and rural development.¹⁴

As late as 1955, however, the President's Council of Economic Advisers still avoided advocacy of any central Federal attack on the problems of structural unemployment. The processes of adjustment were to be left primarily with the local communities concerned.¹⁵ Areas of chronic labor surplus became an election issue in 1956. Extensive legislative hearings were held, and a number of bills introduced in Congress. Of these, the Douglas bill and the Smith bill (supported by the Administration) were the major contenders. After some compromise, a version of the Douglas bill, known as the Area Redevelopment Act, was passed by the 85th Congress, but was vetoed by the President on September 8, 1958. The President indicated his approval of the principle of Federal aid to depressed areas but objected to specific features of the act submitted to him. He asserted his intention of asking Congress for a "sound" area redevelopment bill when it convenes in January 1959.¹⁶ Thus, in the past three years the plight of depressed areas has become recognized as a national one which, like economic recession, requires coordinated Federal action.

Although outward migration has never been formally encouraged by Federal, state, or local officials concerned with depressed areas, this "remedy" is functioning continuously in practice. This can be seen in the loss of population in chronically labor-surplus areas. For example, 18 out of 60 depressed rural counties in Kentucky lost population between 1950 and 1955; and this experience has been duplicated in Arkansas, West Virginia, and elsewhere.¹⁷ As is noted below, however, a mere count of population between two intervals provides no

¹³ Local redevelopment activities are fully treated in *Depressed Industrial Areas—A National Problem*, Ch. IV.

¹⁴ See Levitan, *op. cit.*, Ch. 3.

¹⁵ *Economic Report of the President* (Washington: G.P.O., January 1955), p. 57.

¹⁶ *Labor Market and Employment Security* (September 1958), p. 3.

¹⁷ *Legislation to Relieve Unemployment*, p. 850. In another study, a depressed rural county in West Virginia suffered a 16 per cent population decline between 1940 and 1956. Gerald Somers, "Labor Recruitment in a Depressed Rural Area," *Monthly Labor Review*, Vol. 81 (October, 1958), p. 1113.

definitive evidence of a fundamental solution to the depressed area problem.

Persistence of Unemployment. The continued high level of unemployment in depressed areas reflects the fundamental nature of the problems to be solved. In spite of concerted local and state efforts to provide employment opportunities—and the widespread publicity given to these efforts—areas such as Scranton, Lawrence, Johnstown, Terre Haute and Providence continue to turn up in the “substantial surplus” list with discouraging regularity. The fundamental problems which caused the initial declines cannot be readily solved; efforts to attract new industry have often met meager success; and even new industries have not solved the problems of unemployment.

Whereas the availability of surplus labor is expected to be a major attraction for new industry—even where other prerequisites are lacking—recent studies on employment, mobility, and commuting in labor-surplus areas reveal the weaknesses in the new-industry solution to chronic unemployment. Surveys of workers displaced in plant shutdowns in depressed areas disclose the difficulties of their reabsorption into the ranks of the employed.¹⁸ Displaced workers, especially those in the upper age brackets, often spend many months before finding employment. They cannot readily adjust their attitudes or skills toward employment in other industries. Those who find employment are much more likely to be migrants to other areas or long-distance commuters. Whereas young workers and new entrants into the labor force may be willing to move,¹⁹ older workers are less likely to do so.

Studies of the attraction of workers to a new industrial facility in labor-surplus areas substantiate these findings.²⁰ Many of the workers hired by new manufacturing facilities transferred from out-of-state. Many reduced the long-distance commuting which had provided pre-

¹⁸ William H. Miernyk, *Inter-Industry Labor Mobility: the Case of the Displaced Textile Worker* (Boston: Northeastern University Bureau of Business Research, 1955); Richard C. Wilcock, “Employment Effects of a Plant Shutdown in a Depressed Area,” *Monthly Labor Review* (September 1957).

¹⁹ Studies of the plans and mobility patterns of high school leavers in depressed areas indicate widespread migration from the local labor market. Selwyn L. Wayman, *A Study of the Occupation and Location Plans of Morgantown (W. Va.) High School Seniors*, unpublished Master’s thesis, West Virginia University, 1957; Naomi Riches, “Education and Work of Young People in a Labor Surplus Area,” and “Worker Mobility in a Labor Surplus Area,” *Monthly Labor Review* (December 1957).

²⁰ Somers, *op. cit.*; and “Labor Supply for Manufacturing in a Coal Area,” *Monthly Labor Review* (December 1954); also *Labor Supply and Mobility in a Newly Industrialized Area*, bulletin to be published by the U. S. Department of Labor, 1959.

vious employment outside of the depressed area. The local unemployed, who possessed less "desirable" qualifications from the standpoints of age, education, and skill, were frequently rejected in favor of employed workers who were willing to change employers.

A number of these studies have indicated the power of home-area attachment as a factor militating against permanent solutions to depressed area problems. Workers who leave the area or commute long distances in search of employment retain their ties to the home area and return whenever their distant employment is terminated. They are also quick to return when a new facility is established in the home area, thus thwarting the employment prospects of the surplus local work force. These tendencies have been especially apparent in depressed rural areas.²¹

UNEMPLOYMENT COMPENSATION IN DEPRESSED AREAS

Given these fundamental maladjustments and patterns of employment and mobility in chronically labor-surplus areas, what are the effects on the unemployment compensation system, and what hopes does the system hold for the future?

Effects on Unemployment Compensation. The most obvious effect of persistently high levels of unemployment in depressed areas is to create a notable differential in benefit adequacy and in the drain on unemployment insurance funds. The experience in Pennsylvania's chronically depressed areas is typical. As is seen in Table 2, continued unemployment compensation claims are substantially greater in depressed areas than in the remainder of the state. The differential is notable in prosperous as well as recession years. If Erie is omitted from the list (as is seen in Table 1, its claim to the "surplus-labor" title is not as strong as the others), the remaining 11 depressed areas represented one-seventh of the State's labor force in 1955; and yet, between 1953 and 1956, these areas, combined, accounted for 28 to 38 per cent of the State's unemployment compensation claims. Benefits paid in these areas during the same years represented 27 to 37 per cent of the total; exhaustion of benefits, 27 to 35 per cent of the total; and, as a measure of benefit inadequacy, from 25 to 28 per cent of the State's total public assistance payments went to the depressed areas.²²

²¹ For an interesting discussion of this problem in Kentucky, see *Legislation to Relieve Unemployment*, p. 41. West Virginia experience is discussed in Somers, "Labor Recruitment in a Depressed Rural Area," pp. 1117-8.

²² *Legislation to Relieve Unemployment*, p. 830.

TABLE 2

Average Weekly Number of Continued Unemployment Compensation Claims as a Percentage of UC Covered Labor Force, in Areas of Substantial Labor Surplus in Pennsylvania, 1953-1957*

Labor market areas	Continued UC claims				
	As a percentage of UC covered labor force		1955		
	1953	1954	1955	1956	1957
State total.....	3.1	7.0	4.8	4.4	4.9
Major areas					
Altoona.....	4.8	8.8	5.4	4.8	6.0
Johnstown.....	5.8	14.5	7.2	5.9	7.5
Scranton.....	8.1	12.5	10.6	8.7	9.7
Wilkes-Barre-Hazleton.....	11.6	16.4	11.4	10.5	10.9
Erie.....	2.5	6.2	5.0	3.4	5.2
Smaller areas					
Berwick-Bloomsburg.....	4.0	9.9	7.2	10.6	8.6
Clearfield-DuBois.....	6.7	13.8	8.6	6.0	7.8
Lewistown.....	4.6	10.4	6.8	6.3	6.5
Lock Haven.....	3.8	9.5	7.6	4.6	7.3
Pottsville (Schuylkill Co.).....	10.5	18.7	11.3	9.4	11.5
Sunbury-Shamokin-Mt. Carmel.....	8.2	17.0	11.3	8.3	8.3
Uniontown-Connellsville.....	9.1	21.5	12.3	11.1	12.1
12 surplus areas combined.....	8.3	15.0	9.9	8.5	9.4
Remainder of State.....	2.3	5.7	3.9	3.7	4.2

* Based on March 1955 UC covered labor force.

Source: Bureau of Employment Security, Pennsylvania Department of Labor and Industry.

Similar findings are seen in Kentucky, where 9 chronically surplus-labor markets represented one-fifth of the labor force in 1955. During the years 1953-56, continuing unemployment compensation claims in the depressed areas, combined, constituted an average of 33 per cent of the State total. Exhaustion of benefits in the depressed areas accounted for an average of 29 per cent of the State total.²³ Data for surplus-labor areas in New Jersey and Tennessee similarly demonstrate that unemployment compensation claims, benefits exhaustion, and public assistance payments greatly exceed these measures in other sections of the States.²⁴ These results could undoubtedly be duplicated in most of the nation's chronically depressed areas. They reveal a serious drain on state unemployment compensation funds and a serious inadequacy in benefits. These inadequacies go well beyond those found in areas of more normal employment.

²³ *Ibid.*, pp. 838-847.

²⁴ *Ibid.*, pp. 871-3, 902.

In addition to the problems associated with drains on compensation funds and the exhaustion of benefits, it is likely that many of the unemployed in depressed areas are ineligible for benefits. Especially in depressed rural areas, where agricultural employment, self-employment, or employment in very small retail and service establishments is prevalent, many of the unemployed would not have worked in covered jobs. Extreme cases of underemployment might further reduce eligibility in these areas.

Some Proposals. Even though workers in depressed areas receive, in total, more than their proportionate share of unemployment compensation funds, it is apparent that they also suffer, as individuals, from more than their share of the inadequacies of the systems. Recent proposals to extend coverage and improve the size and duration of benefits, through minimum Federal reinsurance, would do much to improve their lot. Workers in these areas suffer as much as any from the competition among states for reduced taxes and benefits. In common with workers in other areas, eligible workers in depressed areas have been aided by the extension of benefits under the Temporary Unemployment Compensation Act of 1958.

The question remains whether more can and should be done through an unemployment compensation system to ease the burden of unemployment in chronically depressed areas. Because of the peculiar nature of labor supply and mobility in depressed areas, efforts to attract new industry through local and/or Federal assistance are likely to provide only partial solutions. A hard core of local unemployment appears to persist despite these efforts, and the core is augmented by return-migrants in periods of national recession. The mere extension of unemployment benefits to these workers, while desirable from the standpoint of immediate relief, provides no permanent depletion in the ranks of the unemployed. Indeed, a no-strings-attached extension of benefits may aggravate the long-run problem by discouraging outward mobility.

These considerations lend weight to proposals in the Douglas Area Redevelopment bill for special extensions of compensation to jobless persons who undertake vocational retraining. Although many older workers and quasi-unemployables would be unable to benefit from retraining, recent studies of labor supply indicate that industrialization must be combined with retraining if it is to provide any substantial solution to unemployment in chronically depressed areas. Obviously, administrative techniques would have to be de-

signed to ensure the value of specific training proposals and prevent payment to ineligible workers.²⁵

A more controversial scheme involves the use of extended unemployment benefits to encourage desirable outward migration and discourage return migration. Under such a proposal, additional benefits would be paid to jobless workers in chronically depressed areas if they relocated to designated areas of labor shortage; and benefits would be denied workers who migrated to depressed areas (within a minimum period prior to registering for benefits). Many objections to this use of unemployment compensation can be readily recognized. At the same time, it must also be recognized that government payments of *additional* benefits to unemployed workers in depressed areas can hardly be justified if they simply serve to perpetuate the patterns of chronic unemployment. It is a function of the nation's employment service to bring workers into contact with jobs. It is reasonable to expect that its closely related adjunct, the unemployment insurance system, will further rather than impair that function.

Proposals such as these obviously involve thorny problems of financing and administration. But their costs must be weighed against the social and financial costs of persistent structural unemployment. They deserve study along with other proposals to make unemployment insurance a more effective instrument of social and economic policy.

²⁵ In this regard, studies should be made of the use of retraining payments in Michigan, Washington, D.C., and in Great Britain and other countries where the proposal has been adopted. It is especially important to determine whether some noted deficiencies stem from the peculiarities of these systems, from administrative procedures, or from more fundamental causes.

Part V

**VALUE OF INDUSTRIAL AND
HUMAN RELATIONS RESEARCH
TO SOCIAL SCIENTISTS**

CONTRIBUTION OF INDUSTRIAL AND HUMAN RELATIONS RESEARCH TO ECONOMISTS' THEORY OF THE FIRM

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It is the application of the concepts and techniques of various social sciences to a particular set of institutions such as the firm, the union, and the labor market that determines the character and significance of research in human and industrial relations. That economics may make a contribution to such research is clear. But if we identify economics with the central core of concepts and the unique methods of the economist, what contribution has or can industrial and human relations research make to economics? This is the question at issue. In order to bring my remarks into focus, I shall cast them around the contributions of such research to the theory of the business firm. Discussion might have centered about the union or the labor market, but since a recent volume sponsored by this association covered these areas,¹ I feel less compunction about slighting the contributions of research to these areas of economics.

THEORY OF THE FIRM

The economist's theory of the firm stems from his primary interest, at least historically, in developing a theory of market structure and market behavior. This was clearly true of Alfred Marshall, who developed the concept of the representative firm "whose costs of production exercise so great an influence on the amount that will be forthcoming to meet any market demand, that they play a prominent part in the regulation of price under competitive conditions."² It was equally true of the theory of the firm as developed in the early 1930's by Edward Chamberlin, Joan Robinson, and others.³ But the business firm in a free market is "an island of conscious power" in an "ocean of unconscious cooperation";⁴ it is distinguished by the

¹ Neil W. Chamberlain, Frank C. Pierson, Theresa Wolfson, eds., *A Decade of Industrial Relations Research, 1946-1956*, IRRA Series, (New York: Harper, 1958).

² Alfred Marshall, *Industry and Trade* (London: Macmillan, 1927), p. 507.

³ Edward Chamberlin, *The Theory of Monopolistic Competition* (Cambridge: Harvard University Press, 1933); Joan Robinson, *The Economics of Imperfect Competition* (London: Macmillan, 1933).

⁴ D. H. Robertson, *The Control of Industry* (New York: Harcourt, Brace, 1923), p. 84.

“supercession of the price mechanism.”⁵ It is, therefore, not surprising that traditional economic concepts and techniques, concerned largely with the price system, have not been completely adequate for explaining the business firm.

The textbook formulations of the theory of the firm presuming to describe the firm’s behavior, which arose from the Chamberlin-Robinson revolution, have served as straw-men for many attacks upon the realism of this theoretical formulation. There are precedents for questioning the significance of this theory. While I shall have occasion to point to the limitations of this theory and to the work still to be done, I do not wish to join the detractors. Moreover, as I look at some of the current research in industrial and human relations, I am moved to suggest that some of it falls short precisely because it fails to consider the insights which the economic theory of the firm emphasizes. A review of a decade of discussion concerning the theory of the firm leads me to three conclusions which I shall state but not defend:⁶

1) The theory of the firm throws much light on reality by focussing attention on a limited number of important factors.

2) Many observed “rules of thumb” alleged to “disprove” reality are in fact consistent with the theory.

3) The theory is limited in several important respects including, in particular, its formulation in stationary terms and its failure to analyze the process of decision-making internal to the firm.

The firm, then, is an island of decision-making in which the price-system is supplanted by conscious planning related, of course, to external markets. Generally, implicit in the traditional theory of the firm are several assumptions:

1) *The stationary assumption*—it assumes that wants, resources and the body of knowledge are given and unchanging.

2) *The independence assumption*—it assumes that wants, resources and the body of knowledge are independent of one another and of the actions of the firm.

3) *The motivational assumption*—the purposes or goals of the firm are assumed to be maximizing of net benefits (or profits).

4) *The informational assumption*—it assumes that there is a well

⁵ Ronald Coase, “The Nature of the Firm,” *Economica*, N.S., vol. 4 (1937), pp. 389–90.

⁶ For a discussion of some of this literature see Richard B. Heflebower, “Full Costs, Cost Changes, and Prices,” in National Bureau of Economic Research, *Business Concentration and Price Policy* (Princeton: Princeton University Press, 1955), pp. 361–396.

organized informational system for the acquisition and dissemination of relevant information to the firm and within the firm, whether this be concerning technical processes, human relations, the markets for products and raw materials, or facilities for production.

5) *The organizational assumption*—it assumes a process for decision and action within the firm by which the decisions and actions of various individuals are related to one another in terms of the maximizing purpose of the firm.

Even casual observation of business firms indicates that the processes of the firm are more complicated than these assumptions suggest. These assumptions visualize the firm as essentially passive, adapting to market conditions. But the firm is often an important point of initiative. Wants, resources and the body of knowledge are subject to change. In part they change as the result of forces external to the firm. To this extent the problem of the firm is one of adaptation. Of more significance is the fact that wants, resources, and the body of knowledge are changed often by action of the firm itself. Firms undertake to mold wants by advertising, sales effort, and product development. They seek to add to the body of knowledge by research. They seek both to disseminate and to impede the dissemination of new knowledge. Finally, firms seek to add to the body of effective resources by exploration, by developing new knowledge concerning their use, and by "creating" new resources through training personnel, draining land, etc. In short, some firms much of the time and perhaps most firms some of the time are innovators, developers, and disseminators. A theory of the firm which fails to make allowance for these factors must be used with caution in the analysis of real situations.

It is with these limitations of the traditional theory of the firm in mind that I wish to comment on research bearing on the business firm. Some, but not all, of this research has been undertaken by persons closely associated with the IRRA. The distinguishing characteristic of these studies is their multidisciplinary and interdisciplinary character. The research falls into two types, that concerned with the relation between the firm and the external environment, and that which deals with problems internal to the firm.

ENTREPRENEURIAL HISTORY

The work of the entrepreneurial historians represents a multidisciplinary effort at understanding the dynamics of an industrial society. Although their efforts have not been closely associated with the ef-

forts of the IRRA, their work is, I believe, significant for anyone who would understand the business firm. Joseph Schumpeter was responsible for the great man thesis with respect to entrepreneurship. But the work of Arthur Cole and his associates at Harvard and elsewhere suggests that the process of innovation and entrepreneurship must be viewed more as a continuing process. Often it involves a series of small changes rather than a single large discrete break with the past. From the ongoing research there emerges a concept of entrepreneurship as a "more or less continuous set of functions, running from the purely innovative toward the purely routine, and present in all societies where economic change goes on over time, whether exercised by the individual, by many individuals, or by group, organization or official agency."⁷

The shift from the study of the great man has focussed attention on the sequence of events. The interacting of individuals, firms, and industries takes the center of the stage. The type of question involved in entrepreneurial studies "begins from a broader base, running from the most general—what are apparent possibilities in any economic situation relative to the observed responses, where are entrepreneurial functions located and through what forms and channels are they organized—proceeding through an intermediate range, i.e., how do the 'objective' opportunities, institutions and value systems of different societies (or smaller groupings) affect the way they recruit, organize, train, allocate and motivate their talent—and moving toward the more specific: who enter into the different kinds of entrepreneurial roles, how defined, with what goals, incentives, and span of action, producing what patterns of performance, in what sectors, with what consequences, etc."⁸

INVENTION AND INNOVATION

Related to the work of the entrepreneurial historian has been the work on invention and innovation by such persons as Usher, MacLaurin, Brozen, Gilfillin, Jewkes and Walker. Such studies have been concerned with the circumstances favorable to invention and with the process of dissemination and application of new technical knowledge. Researchers in this area have generally been concerned with a detailed examination of the sequence of events from invention to changes within the firm and in market structure and market be-

⁷ John E. Sawyer, "Entrepreneurial Studies, 1948-58," *The Business History Review*, vol. 32 (Winter 1958), p. 439.

⁸ *Ibid*, pp. 441-442.

havior. They have given considerable attention to the cultural milieu and to the legal structure including patent policy. The results are of interest to the economist in view of his traditional interest in the process by which the firm adapts to external changes. But when innovation and invention are seen to arise from within the firm, it is clear that the functions of the firm take on new dimensions. Rival strategies have more facets than changes in price, volume, and sales. The theories of monopolistic competition and oligopoly need elaboration accordingly. For example, some of the problems of conjectural interdependence in oligopolistic markets disappear or take on new form in a market where strategy is diverted from price to research on products and process. Although rivals may meet one another immediately in the case of price changes, there may be significant lags in the case of product and process changes.

Of what significance is the work of students of entrepreneurial history and invention and innovation? The research of these scholars goes to the heart of the first two assumptions embodied in the traditional theory of the firm. These researchers assume that wants, resources, and the body of knowledge are *changing*, and they seek some explanation of the process of change and of the adaptation of the firm. Secondly, this research makes clear that wants, resources, and the body of knowledge are not independent of one another or of the activities of the firm. The interdependence of wants, resources, and activities emphasized by Alfred Marshall is re-emphasized by these researchers. It is fair to say that as yet this work has not led to any new formulations of the theory of the firm. But it has served to place emphasis on the importance of the cultural milieu and of individual differences in the development and strategy of the firm. Since these researchers have placed their emphasis upon change, they have broken the boundaries of the stationary assumptions. They pose a problem to the theorists of the firm and suggest caution in the use of conventional models.

DECISION-MAKING WITHIN THE FIRM

The second group of studies relevant to the firm consists of the various studies of decision-making within the firm. These studies are concerned with the goals of the firm and individuals within the firm, the organization for decision, and the process of decision.⁹

While economists have talked a good deal about the goals or pur-

⁹ For an interesting review of much of this literature see James G. March and Herbert A. Simon, *Organizations* (New York: Wiley, 1958).

poses of economic activity, sociologists and psychologists have done the principal research in this area. The latter have emphasized the relative unimportance or secondary importance of financial incentives to individuals. But, as I will suggest, we need to relate individual incentives and actions to the goals of the firm.

The economist's usual maximizing assumption arose from his preoccupation with the competitive situation and with the more aggressively acquisitive sectors of the economy such as wheat, security, and textile markets. In a highly competitive market the survival of the firm depends upon achieving the efficiency of the "representative firm." The problem of reconciling the goals of individuals with the purpose of the firm, that is the problem arising from group decision-making or from the separation of ownership from control, is minimal. Under highly competitive conditions the range of freedom open to the firm consistent with survival is limited. Whatever the personal objectives of individuals responsible for decision, whether they wish large income, power, prestige, or even a quiet life, these can generally be attained through the firm only on the condition of its survival. The processes of decision within the firm must be directed towards maximizing. The behavior of the firm is structured by the structure of the market.

But in the more usual situation where conditions of monopoly or oligopoly exist, the problem is more complicated. The range of goals open to the firm may be wide. The place of individual objectives and the interplay of various individuals' objectives may play a large part. Between the firm's potential "maximum position" and its "survival position" there may be more or less leeway for alternative behavior. There are two aspects of the problem. The first is the position in the industrial matrix which the firm seeks to fill. Does it seek to be a mass producer of standardized products, or does it seek a smaller position in a protected section of the market making specialty products? Does it seek to be an innovator or a follower? Etc. The second aspect of the problem is the way in which it exploits its position. For example, does it seek to maximize profits, sales, or output? With respect to both aspects of the problem the idiosyncrasies of individuals as well as the compromises between interacting individuals within the firm may play a role. Research in this area is likely to call for an understanding of three things: 1) the limits placed upon the firm and the individuals within the firm by outside forces such as market, government policy, etc.; 2) the processes of decision internal to the firm; and 3) the time horizon within which various decisions are

made. The role of the market as a conditioning force has traditionally been given great emphasis by the economists. The formal processes of government as well as the informal processes have been explored by economists and sociologists. But the role of individual personalities in determining the position of the firm and the way in which it exploits this position has hardly been explored.¹⁰

Research concerning the goals of the firm and the interplay of the objectives of individuals has been rather limited. Alternative hypotheses have been suggested and some individual pieces of research are at hand. Studies by A. D. H. Kaplan and his associates are suggestive concerning the basic strategy of some large firms.¹¹ Some studies of individual leadership and executive action illustrate the interplay of individuals in the management process. Some studies illustrate the relative importance of profit calculations in particular aspects of business behavior.¹² But there is no analytical framework at present which puts these bits and pieces together in a way which indicates their significance to the theory of the firm; that is, in a way which indicates what difference individual goals make to the goals and behavior of the firm as reflected in price, production, sales, capacity, and related decisions. To be meaningful, analysis of goals must be placed in terms of the available range of alternatives. Within this range we should like to know what role individual personalities play in the definition of goals; to what extent different personalities affect the horizon of decision; to what extent there is a selective process by which particular personalities are attracted to or survive in particular types of situations; to what extent and by what means the internal processes of the firm achieve a channeling of individual efforts to the fulfillment of its goals.

Our discussion of the goals or purposes of the firm and individuals therein makes it clear that this problem is meaningful only in the context of an analysis of the process of decision-making within the firm. This is the central problem around which research might be oriented. Studies of decision-making have been proceeding on two

¹⁰ Consider, for example, industries where the cost curve is horizontal and the economies and diseconomies of scale are unimportant over wide ranges. In such cases, because of the significance of potential competition, firms may have little freedom with respect to prices or costs but they may have considerable freedom with respect to volume. The structure of the market, consequently, may depend upon the sequence of decisions in which the preferences of individuals and the process of decision-making within the firm may play an important role.

¹¹ A. D. H. Kaplan, Joel B. Dirlam, Robert F. Lanzilotti, *Pricing in Big Business* (Washington, D. C.: Brookings Institution, 1958), ch. 2.

¹² George Katona, *Business Looks at Banks* (Ann Arbor: University of Michigan Press, 1957).

levels. One is concerned with the mathematical models of decision theory especially under uncertainty. This work has emphasized the complicated nature of decision-making and the conceptual difficulties of the problem. To become effective as a tool of empirical research it will be necessary to relate these models to people and processes and to express the models in terms of variables which are empirically significant and comprehensible. At the second level, empirical studies of processes of decision-making are being undertaken in many directions. The more fruitful have been conceived in narrow terms; for example, decision-making in relation to price, inventory, and investment policy. To date much of the work of this type has been done by the economists themselves. There is a wide range of work to be done of this sort. It may be only after much of this more detailed research has been completed that we will be able to develop a comprehensive theory of decision-making within the firm which will relate decisions with respect to these various functions to one another and to the "grand strategy" of the firm.

HUMAN RELATIONS

A survey of recent work reveals considerable research particularly by psychologists and sociologists on human relations. How does this research fit into the economist's conception of the firm? Of what significance is it to him? As I have emphasized, the economist's model of the firm is concerned primarily with the external relations of the firm. It is conceived as an organization mediating between wants and resources. Its relationships are summarized in demand and cost. Much of the human relations research is concerned with the behavior of the working force and of production workers. The economist's theory normally postulates production functions and supply prices for the factors. Yet if there is any reason for research on human relations, and I believe there is, it is because production functions are not determined simply by technical conditions but depend upon the behavior of persons within the firm. "Good" human relations and "bad" human relations may be the difference between high cost and low. Leadership in human relations may be the basis of competitive advantages. The study of human relations, then, represents one facet of changing knowledge, the development and dissemination of which is an important function of the business firm as well as of other institutions. Leads and lags may make an important difference to the competitive position of rival firms. The general economist is not

particularly interested in "how to handle people" just as he has no more than passing interest in the chemistry of industrial processes. He is concerned, however, with the impact of all activities of the firm, including human relations, on the key variable of demand and cost and, in oligopolitistic situations, upon the selection of strategies. In analyzing policy with respect to business structure he would be interested to know whether there are significant differences between the human relations efforts of large and small firms, or between monopolistic and competitive firms. He would like to know to what extent costs of large firms are increased by human relations experiments, and to what extent their experience becomes available to others at no cost.

CONCLUSION

I have tried to indicate the kinds of problems in the development of the theory of the firm on which the economist might be aided from the research on industrial and human relations. If I have pointed to few substantial contributions, it is because I believe that there has been little research to date which is clearly of major significance to economists in their understanding of the firm. The more promising work has been that of Katona at the Survey Research Center at Michigan and of Simon at Carnegie Tech. The significance of their work, I believe, has been enhanced by the fact that they have attempted to relate their research to the central core of economics. Those who have failed so to relate their research have, by and large, likewise failed to demonstrate that their contributions are of substantial significance to the economist.

THE INFLUENCE OF HUMAN RELATIONS RESEARCH ON PSYCHOLOGY: IN PRAISE OF MAVERICKS

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The title of this panel, when I was originally told about it, was this one:

“A Critical Evaluation of the Usefulness of University Sponsored Industrial and Human Relations Research to the Social Science Consumers of Such Research.”

That title is terribly difficult to catch hold of. Part of the difficulty, of course, lies in its reversal of our usual set. It asks us to reverse our usual direction of thinking to indicate the influence of the more applied researcher on the more basic one. On that score I won't complain. It is, I am sure, a useful thing for us to try to recite the alphabet backwards for a change.

But the title is hard to catch hold of for two other reasons. First, it suggests a dichotomy between “industrial and human relations researchers” and “social scientists.” Maybe the suggestion is a by-product of the title; but it raises, as a first problem, the clarification of boundaries, the identification of groups. Since I am supposed to talk about psychology, it raises the issue of differentiating human relations psychologists from “consuming” psychologists.

Second, the title caused me some trouble because it seemed to beg the question, to imply that nonhuman relations psychologists are, in fact, consumers of human relations research; and that if, in effect, industry has influenced the heartland of academic psychology, it has done so through the mediation of an intervening group of “industrial and human relations researchers.”

From my view these implications are misleading. The big problem is not so much that many people hold memberships in both parties, as psychologists and as human relations researchers; but rather that the flow of influence in the special direction we are talking about here has not simply bounced off of human relations researchers on to the rest of psychology.

I would suggest the following views instead, and I will try to support them:

1. In general, the influence of industrial and human relations research upon more academic psychology has been relatively slight—relatively, that is, to the influence of, say, other disciplines like academic sociology, mathematics, and economics.
2. The influence of industrial problems (not necessarily of industrial and human relations research) on academic psychology has been increasing rapidly of late.
3. The historical route of influence from industry to psychology has been a complicated one that looks something like this:
 - a. The first major onslaught was in the direction psychology to industry. It was carried out by small but lively groups of maverick psychologists who deserted (and this is literally true) their rats and their brain extirpations to see if they could use their psychological insight to attack industrial problems. These people have been notably successful in their influence upon industry and in their development of a greater understanding of industrial organizations. Many of them, of course, became members in good standing of the then developing stateless body of mavericks from several disciplines who are now grossly labelled “human relaters.”
 - b. The risks taken by the first group of psychological mavericks opened up an environment in which a newer as yet smaller group of mavericks could settle. If we label the first group the “practicing mavericks,” the second group can be called the “theorizing mavericks.” I think that most of the direct influence of industry on psychology has been carried by the theorizing mavericks rather than the practicing mavericks. Incidentally, of course, some individuals hold dual memberships here too.
4. The mechanisms of influence have been individuals (or groups) who have themselves straddled the distance between the profit and loss statement and the Skinner box. The mechanism has not, so far as I can see, been a series of relays from Industry to human relations researchers to academic psychologists.

Let me try to elaborate on each of these points, using specific areas of psychological research and theorizing to illustrate.

First, some reasons for the statement that the influence of human relations and industrial research on psychology has been slight:

Consider Chris Argyris' review, in 1954, of the present state of research in human relations in industry (1); consider, too, for the same year, *The Annual Review of Psychology's* (2) chapters on social and industrial psychology.

The chapter on social psychology's most frequent journal reference is to the *Journal of Abnormal and Social Psychology*. Almost 30 per cent of all journal references are to it. The same journal is mentioned only once in Argyris' 168 entries. *The Public Opinion Quarterly* is the second most frequently mentioned journal in the *Annual Review*. It too, receives one mention from Argyris.

The Industrial Psychology chapter in the *Annual Review* refers to the *Journal of Applied Psychology* almost 25 per cent of the time. That journal never makes Argyris' bibliography at all. But that was 1954. The 1957 *Annual Review* (3) should be better. But it is not, in social psychology; and in industrial psychology the big change seems to be a shift toward more references to *Personnel* and the *Harvard Business Review*, rather than toward *Human Organization*, (the one Argyris makes most frequent reference to). The *Annual Review of Psychology* seems not to have discovered *Human Organization* as of the 1957 edition.

These bibliographical facts, though barren, make me think that if industrial and human relations research have been making an impact on psychology, they are not doing it through the standard channels.

I will take long odds (since I've already done some sampling) that most people who call themselves even "social" psychologists seldom, if ever, see many of the journals in which industrial and human relations researchers publish.

My second point is that there has been a recent stir of activity in the direction suggested by the title; that a small wave of influence has been moving at least partially in the direction industry to psychology. Again my evidence is fragmentary, and some of it is clinical. But the recent proliferation of what I shall call (with only some sarcasm) methodologically hard-headed research by psychologists (and by economists and sociologists as well) has begun to tickle the ears of some academic psychologists who have never been tickled before.

The mechanisms of communication by these researchers, however, have not in general been the ones I have already mentioned—that is, not the ones that have carried psychology to industrial research. They have been newer, in their turn, avant garde, maverick publications like the new version of *Sociometry*, *Behavioral Science*, *Management Science* and even the *Administrative Science Quarterly*. These are not the human relations research journals. They all put more em-

phasis on their own versions of rigorous scientific method, and all have a strong cross-disciplinary flavor.

Now to the third point. The one that accounts for my subtitle, "In Praise of Mavericks." I want to praise two not entirely separable, classes of mavericks. First, the class epitomized by names like McGregor, Maier, Stagner. These I label, (and they will most probably disapprove) "practicing mavericks." I praise them, though, not primarily for their influence on psychology, but for risking their psychological necks, first to (successfully) influence industry; and, second, to open industry to a second class of mavericks who have indeed influenced psychology. In this second class, I will again take glib liberties, characterizing them with names like Alex Bavelas and Herbert Simon (is he a psychologist?); these are my "theorizing" (as distinct from "practicing") mavericks.

The first of these groups has, I think, succeeded in translating and communicating psychology to industry in the language of industry; the second has influenced psychology by being able to communicate industry to psychology in the language and with the methods of psychology. The first group has had to risk the epithet of "soft headed," from their cloistered colleagues; though note that McGregor used to look into nervous systems, Maier gained fame as a rat man, and Stagner wrote a major book on personality. The second group, too, has on occasion been asked by people in industry please to return to their caves.

Incidentally, there have been some real giants in both these groups who have moved (and survived) in both directions. They have been capable of spanning the distance that has existed in the past decade or two between the maze and the organization chart; publishing respectable, indeed outstanding works in language intelligible to inhabitants of both worlds.

This last point needs emphasis. The theorizing mavericks, if they are really influencing psychology, are doing it by making contributions to psychology in forms that can be seen as such by psychologists.

They are providing *methods* for studying organizational problems that communicate (because they are perceived as legitimate) to the hard-heads among psychologists.

As far as the discipline of psychology is concerned, then, I think that most of the influence that has been brought to bear at the core has been brought to bear largely by people like these. I think there has been correspondingly less influence on the discipline as a whole

by people who have worked in narrower bands along the way between the plant and the classroom.

In one way, I have already elaborated my fourth point; that one was that influence has been carried by people who straddle the full distance rather than by a series of relays. My theorizing mavericks—I mentioned Bavelas and Simon—have not just interpreted or rewritten human relations research in the language of psychology. They are making contributions to psychological knowledge, apparently partially as a consequence of their interest in industry. I don't think industrial or human relations research just rubs off on psychologists. Somebody needs actively to bore from within.

Let me turn now from these general considerations to more specific ones. I would like to say a few words about each of several active areas of psychology, trying to answer the questions of sources, extent and media of influence raised earlier. Note that these areas are close to problems of industrial research and practice. I have not touched upon distant areas like physiological psychology or even on work on learning and thinking.

I. SMALL GROUPS:

The recent rate of output of research in this area has been very great indeed. Much applied work has been done on conference leadership, on training group leaders, on selecting teams by sociometric methods, and so on. Much experimental and theoretical work has been done, too, on a multitude of aspects of group structure and member interaction, without reference to industry. Finally, as you all know well, a great deal of the kind of field research under consideration here has been done, too; from the Western Electric researches to the work of the Survey Research Center and the applied anthropologists.

My assessment of the effects of industrial research on the direction of laboratory and other non-industrial research on small groups runs like this:

The flow of influence has been predominantly from academic psychological theory to industrial research rather than in the other direction. The influence of Lewin on social psychological *and* industrial thinking about groups far exceeds the influence of any industrial researchers I know of.

Nevertheless, some considerable interplay has occurred between

industry and social psychology in this realm, and to deny that social psychology has been influenced would be absurd.

But again I would argue that there have been two major and related kinds of influence, neither of which has been of the rubbing off type.

First, there has been much influence born by theorizing mavericks; social psychological types with interests in industry *and* academic psychology. A particular study that fits this model is the now classic Coch and French (4) research on the introduction of change in industrial groups. Social psychologists know this study; they quote it, they teach it (though they are having trouble replicating it). But they do so not because it has applications for industrial practice, but because it was a test of some important psychological hypotheses about change. Industry was the available, neat medium for this research.

A second major source of influence in the small group field lies simply in the fact of industrial support. To wit: The Bell Telephone Labs, an industrial organization, recently set up a group of social psychologists doing social psychological (but not necessarily industrial) research on small groups. So, too, many small group researchers are being hired into industry, or being invited to carry out their research in industrial organizations, or fighting their way in because they feel they can study rich problems of, for example, intergroup conflict in the industrial environment.

II. COMMUNICATION

I argue forthwith that the bulk of the talk about communication in industry has had little influence on psychology. Activity inside of psychology over the issue of communication has been stirred up mostly by experimentation inside of psychology, in non-industrial situations, and has been influenced very heavily by the disciplines of mathematics and engineering.

Academic psychologists, when you ask them about communication, will, I believe, make associations not with the Survey Research Center's work, but with laboratory experiments like those of Festinger, Bavelas, and Miller; or with survey work like that of Lazarsfeld and Katz; and, at the next level with Shannon and Wiener and the others over in the hard, physical science side of the world.

III. INFLUENCE AND BEHAVIOR CHANGE

Influence theory is another realm of furious psychological activity these days. Many psychologists and other behavioral scientists, in

one way or another, are concerned with the processes of attitude and behavior change, in individuals and organizations.

Here clearly one thinks quickly of some industrial research of the past couple of decades. Warner's Yankee City studies, Cornell's Whyte, Homans, Sayles; all these too have been concerned if not with the manipulation, at least with the observation of organizational change. All these studies have dealt, in one way or another, with influence and behavior change, mostly through the industrial medium. Many have dealt largely with problems of the introduction of methods or technological change into industrial organizations.

But which of them has seriously influenced ivory tower psychology? To find out, I have checked two relatively recent and major psychological books about change. Hovland, Janis and Kelley's *Personal Influence* (6) and Lippitt, *et al*, *The Dynamics of Planned Change* (7). In the first, there is not a single reference to Kahn, Morse, Whyte, Sayles, Homans, Mayo, or Roethlisberger. French is mentioned; so is Bavelas; so is Carl Rogers.

Lippitt's book does better; it refers to Mann, Morse, and Likert. Notice though that all these are field researchers who happen to live at the same university that Lippitt does. Incidentally, Lippitt's group, the Research Center for Group Dynamics, has been extremely influential on psychological thinking in this area, but most of their work has been nonindustrial.

IV. DECISION-MAKING AND ORGANIZATIONAL BEHAVIOR

Psychological thinking about related areas of decision-making and organizational behavior has, I believe, been much more influenced by theoretical and experimental economists and sociologists than by human relations researchers.

Studies of decision-making in industry have hardly touched central psychological thinking in this area with the exception of a single Carnegie Tech observational study of a major business decision; a study designed to test some hypotheses derived from other sources. Most psychological work on decision-making is tied closely to game theory in economics, to work with computer programs, and to earlier psychological theory about conflict and level of aspiration.

Similarly what appears to me to be the most active psychological theorizing on the nature of organizations has been greatly influenced by sociologists like Selznick, and by work within psychology itself, like experimental studies of problem solving or the Bavelas stimulated

research on communication nets, but relatively little by classic human relations studies.

Let me add just a few more words about a few other areas. The areas of *creativity*, and *assessment of personality*. Both are being seriously influenced by industry, but mostly through industrial financing of research carried out by psychologists and sociologists in industrial environments. Their findings are influencing psychology, of course. They are published in psychological journals; reported at psychological meetings.

My perusal of high spots in the field, then, leads me to these generalizations:

1. The influence of industry upon psychology has not in general been mediated through an intervening community of "human relations" researchers, who are neither industrialists nor psychologists. It has been mediated by two groups of mavericks, one of which is mobile in each direction.
2. The second and newer class, the theorizing mavericks, has carried the most influence to psychology.
3. Things have worked this way for several reasons. One of them needs to be made explicit. Psychologists are a provincial lot. Their reference group is other psychologists. They are overly sensitive about professional respectability. They want to be viewed as hard-headed scientists; to be viewed this way, even if only by one another. They therefore, cannot easily allow themselves to be interested in "soft" research, nor can they find time for or much use in reading "soft" literature, like the publications of this organization. They are, in other words, difficult creatures for auslanders to influence. The theorizing mavericks have begun to succeed by the simple expedient of using their language and thereby passing themselves off as members of the in-group.
4. But the language is a hard language to learn and use. It claims to be, and I think it really is, closely related to the language of science.

These generalizations lead into some conclusions:

1. If human relations researchers want, for some odd reason, to influence psychologists, rather than to ignore them, they should first go and live among the psychologists, to observe their tribal customs, and to learn their languages and to use their methodologies.
2. The proliferation of journals will not, by itself, help. What will help is publication in one language by people whose native

tongue is another—which implies, of course, either more theorizing maverick psychologists joining up with the human relaters, or more human relaters becoming theorizing mavericks in their own right.

3. One of the brightest sources of hope for further interaction and mutual influence among all the groups I have referred to here is, in my judgment, the collegiate school of business. This low caste member of the academic community is a perfect meeting place for odd balls who have been driven or escaped from industry, sociology, economics, mathematics, and psychology. At Carnegie Tech, MIT, Chicago, California and more and more at other universities, the school of business is becoming a place of serious mutual influence among many disciplines and across many levels of activity. The school of business (correction: a small group of schools of business) is the only academic place I know where all the motley kinds of people interested in industry are being forced to try not only to understand one another, but to call upon one another's help. I expect it will be the place where mavericks of all kinds from several disciplines will mate, procreate, and deliver up a curious and perhaps useful new kind of progeny.

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INDUSTRIAL RESEARCH AND THE DISCIPLINE OF SOCIOLOGY

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My general conclusion is that industrial research has provided an unrealized resource for important modifications of sociological theory. These consequences for sociology of our empirical knowledge of man at work makes my task both difficult and easy. I can take the easy course by simply saying that sociology is no different today than it was right after World War I in spite of accumulated facts about working life.¹

The more difficult course, which I intend to pursue, is to attempt to show where the facts of industrial life impinge so insistently on sociological theory as to demand its immediate substantive revision. I will do this by stating a series of analytical problems concerning men at work. Then questions will be asked about the kinds of theory we now have to make sense of our present accumulation of facts. Where theory is inadequate I will attempt the always precarious task of predicting the course, if not the content, of this future theory.²

There are six basic analytical problems with which I will deal:

¹ Representative giants of 19th and early 20th century sociological tradition, like Durkheim, Pareto, Ratzenhoffer, Simmel, Sombart, Spencer, Toennies, Veblen, and Weber had already delineated some of the central analytical problems of the discipline relevant to industrial relations, and made substantive and insightful contributions to their comprehension. Even Adam Smith and John R. Commons have greater relevance today for their essentially sociological insights than for their contributions to economics, as that discipline has evolved.

² A brief note about history. As industrial sociology developed in this country, largely as a result of that pioneering study, *Management and the Worker* (conducted by non-sociologists, but almost wholly conceptualized in its enduring parts by social scientists), a comforting, yet short-sighted research strategy was adopted. It was asserted repeatedly that all good industrial sociology must first of all be good sociology. This strategy demanded that existing theory and conceptual formulations be the starting point for industrial research by sociologists. Sociological research was required to wear the blinders of going theoretical formulations to warrant being considered legitimate. If my general thesis is correct, this was an insufferable burden for research sociologists concerned with industry to carry. Sociological theory was not then adequate to the task, nor is it yet. A major consequence was that some of the best sociological studies of industrial life were made by non-sociologists! A secondary consequence was that sophisticated sociological studies of work eclectically sought theoretical models to make sense out of data, often following a course that led to the disciplines of social psychology, psychology, and even philosophy and ethics. This certainly enriched the body of concepts and ideas providing the grounding for research, but it has left us without a compendium of sociological theory about work in modern society.

(1) conflict and its analysis; (2) power in industrial relations; (3) necessary *vs.* voluntary action; (4) the person and organization; (5) institutions and public opinion; and (6) industry and social values.³ In each instance I will attempt to sketch out the dimensions of major problems demanding analytical conceptualization, indicate how far we have succeeded in that direction, and predict what we might conceivably do to better our current success.

NECESSARY VS. VOLUNTARY ACTION

The historic trend of productive organizations is the specialization of functions within them and the development of unique technologies for their effective performance. The central fact of working life, as industrialization has proceeded, is that the worker behaves as he does while performing work because of the technologies with which he works. In industry we have developed machine technology to solve the problems of output, and fitted men to the jobs thus created. The same is true in the office and on the sales floor. In each instance the priority of technology over the human needs or requirements is evident.

The earliest use of social science knowledge was to take the insights about individual differences revealed through psychological studies and use them as a means for fitting people to tasks. The whole selection movement, grounded in psychological measurement and testing for individual faculties and capacities, was a direct and rational outgrowth of the recognition that the problem of people in industry was to fit men to machines and technical work tasks. If there is one enduring lesson in Taylor's work and the subsequent development of motion study it is this: that a man can be fitted to work tasks whose skill requirements are determined solely by technological considerations. Man as employee was viewed as an animal whose capacity to perform useful work was limited only by his physiology and not his psyche.⁴

More subtle forms of fitting man to work have been developed out of the original interest in his physiological capacities. Thus,

³ The need for shortening this paper for inclusion in the *Proceedings* has led to the deletion of the first two sections. Conflict and its analysis is dealt with in Robert Dubin, *Working Union-Management Relations* (Englewood Cliffs, N. J.; Prentice-Hall, 1958); while power in the industrial setting is dealt with in that volume and its companion, Robert Dubin, *The World of Work* (Englewood Cliffs, N. J.; Prentice-Hall, 1958).

⁴ Many implications of technology for working behavior and management of workers are examined in Dubin, *The World of Work*, *op. cit.*, Chs. 4 and 10.

we may counsel people into one occupation or another depending on their responses to a Strong Vocational Interest test. Complex personality profiles may be used to select administrative and executive personnel to fit the requirements of the jobs for which they are candidates. While we have succeeded in taking more subtle aspects of the human animal into account in employee selection and placement, we still work with the fundamental assumption: that the broad technology determining work tasks provides the criteria for selection of personnel.

The technologies of work in turn are determined by criteria other than the social characteristics of man. The blast furnace is designed to convert ore into pig iron. The consideration for designing the particular means of conversion are wholly independent of the characteristics of man as worker. At final stages in the design of the ore conversion process some decisions are usually made as to whether it is cheaper to use man as an integral part of the productive process, or to substitute mechanical, electronic, or other handling and control devices. This kind of decision usually rests solely on cost considerations. If man as worker is designed into the process, it is on the assumption that whatever the operating requirements are, there now exists workers with the requisite skills, or those who can be readily trained to perform the skills required.

Thus, the human actor is caught up in necessary behaviors that are organizationally relevant, and imperative, but normatively neutral in their consequences for the individual. This means that from the standpoint of the human actor his behaviors become imperative or necessary and are no longer within the range of voluntary social action. Once employed as a blast furnace charger, for example, the specific behaviors involved in carrying out this task are beyond the individual choice of the charger. These behaviors are built into his task as part of the larger process of converting ore to pig iron.

It is perhaps in industrial and business life that the sociologist is confronted with overwhelming evidence that much of the daily round of human life is caught up in necessary rather than voluntary social action. This is not a new datum for sociologists, but it is explicitly set forth with startling clarity in the facts of working life. Man is caught up in necessary behaviors, wholly legitimate in his society, but over which he exercises no control or choice other than the simple choice that he will or will not perform them. Even the choice not to perform them is often severely penalized, and therefore not a significant available choice.

What are some of the kinds of problems that flow from the necessary characteristic of working behavior? Let me briefly discuss three: (1) motivation for work; (2) control of necessary behaviors; and (3) the complementarity of necessary and voluntary behaviors.

The literature on motivation seems to make clear that we have adopted simple theoretical models. Simplicities are first of all related to the assumption that motivation operates the same way whether the action ensuing is necessary or voluntary. The motivation models are also simple because they are grounded in the assumption that people's reactions to a course of behavior are polarized into liking or disliking the action. I think both of these assumptions require important modification.⁵

I do not think the motivation for necessary behavior involves the same kind of mechanisms as for voluntary behavior. Voluntary behavior implies some choice among alternatives on either rational or affective grounds. Necessary behavior, on the other hand, implies no such choice since by definition the choice is not available. Voluntary social behavior also implies that the choice of behavior selected can be expressed in some preferential terms over the courses of behavior not chosen. Since a choice is required in voluntary behavior, the condition of indifference automatically does not apply. The indifferent response would be to reject the need for any behavior among the alternatives available for choice. That is to say, the indifferent response for the person can only mean that he refuses to behave at all in the area in which a voluntary choice is possible.

If we now examine necessary behavior the indifferent category may become a crucial one. The necessary behavior may be carried on by the person because he likes it, or he may carry on the behavior even in the face of active dislike for it. It may also be true that he carries on this behavior with indifference towards it. Thus a subjective reaction of indifference becomes an important probability in necessary behavior.

Industrial studies have already revealed the prevalence of the indifferent orientation of workers toward their work. This is a result that students of industrial life have discovered with refined measuring instruments but which had already been well known

⁵ The application of motivation models to industrial work is summarized in Morris Viteles, *Motivation and Morale in Industry* (New York: W. W. Norton and Company, 1953), and William F. Whyte, *Money and Motivation* (New York: Harper & Brothers, 1955).

to industrialists from their personal experiences in managing business organizations. The remarkable conclusion is that a good deal of working behavior is carried on by people who are indifferent to the things they are doing.⁶

This has obvious and important implications for the philosophy and practice of management. There has been a strong contemporary emphasis on finding means for making people like their work in employing organizations. The assumption is that they will be better workers as a result, better in the sense of more productive and less irascible, more loyal, or what not. When we understand that "indifference" is a coordinate response with "like" and "dislike" to the necessary behaviors caught up in working, we may well be constrained to question whether management practices, designed to move a large segment of workers to a posture of living work, are well advised.

This immediately raises the question as to what motivates people to work. It seems to me that the answer here is clear cut. Motivation is built into the social system. It is the general expectation that males of working ages will, in fact, be employed to earn a living. It is further general expectation that earning a living shall only be through legitimate channels defined in our society as gainful employment in legitimate occupations. Thus the social system provides the motive power to move major segments of the population into labor force. Once in the labor force, however, the performance of work may be responded to indifferently.

This poses the dilemma of how indifferent people are able to work effectively. How is our economic productivity increased from year to year and the fabulous production of goods and services of our society maintained?

There is nothing esoteric about the answer. The answer lies in the fact that necessary behavior is always surrounded by controls policing its performance. These controls operate to insure every work station is, in fact, occupied when it should be; that the quantity

⁶ Representative studies include: Charles R. Walker and Robert H. Guest, *The Man on the Assembly Line* (Cambridge: Harvard University Press, 1952), Ely Chinoy, *Automobile Workers and the American Dream* (New York: Doubleday and Co., 1955); Joseph Shister and Lloyd G. Reynolds, *Job Horizons: A Study of Job Satisfaction and Labor Mobility* (New York: Harper & Brothers, 1949), and Robert Dubin, "Industrial Workers' Worlds: A Study of the Central Life Interests of Industrial Workers," *Social Problems*, Vol. 3 (January 1956), pp. 131-142.

and quality of output is at acceptable levels; and that voluntary behavior does not interfere with the necessary behavior.

There are two basic requirements of necessary behavior; (1) that the behavior required be specifically set forth; and (2) that its performance be surrounded with controls that insure the desired outcome.

You are all familiar with the nature of these controls. Presence at a work station is controlled by time clock recording and physical nose counts. Quality of output is the province of inspection control in process and for the final product. Quantity of output is controlled by measured day-work standards or the built-in operating cycles of equipment. Voluntary social behavior that is inimical to necessary behavior is controlled by shop rules and personnel regulations. Furthermore, the controls just broadly outlined are supplemented by systems of rewards and punishments. Acceptable necessary behavior is rewarded in the pay envelope, through promotions and other forms of approval. Failure to perform the necessary behavior is punished with dismissal, fines, temporary lay offs, reprimands, and similar sanctions.⁷

The point of the matter is that the logic of industrial and commercial output has always been implicitly grounded in the assumption of indifference on the part of workers employed in it. The multifarious control devices used in all productive organizations are the substitutes for voluntary work performance.

I think we will move forward very rapidly at the present time because we are now in a position to recognize the necessary or imperative character of working behaviors, and the generality of the indifferent response of workers to them. We can now see that the structuring of behavior as a consequence of the logics of production, together with the many control devices used to police this necessary behavior, present a whole facet of human action for which simple-minded voluntarism no longer is a meaningful theoretical concept.

Sociologists have long perceived the various kinds of necessary behavior caught up in such notions as folkways, mores, laws, and institutions. We have furthermore been quite aware of areas we call social control where we have analyzed some mechanisms for policing necessary behavior. The data about industrial life now makes clear that we need more refined concepts to understand the

⁷ Cf. Dubin, *The World of Work*, *op. cit.*, Ch. 19.

detailed features of necessary behavior, and the tremendous range and variety of controls surrounding it. This, too, is a challenge to sociology I am sure we will meet.

Before you conclude that I have a picture in my head of man, the worker, as an automaton, let us consider the third topic under the general heading of necessary *vs.* voluntary actions. This is the topic of the complementarity of these two realms of behavior.

If a great deal of behavior is necessary to the functions of the social systems, and this is particularly true of productive systems, then where does modern industrial man have voluntary choices for his behavior? The working person has been caught up in imperative behavior surrounding his work performance. Does this mean that he still has available to him areas of life for voluntary actions? I think the answer is clearly "yes but" (and this is an important but) the realm in which voluntary social action is still open is different from the area of work.

Earning a living has become a highly segmentalized area of life, however imperative the behaviors demanded while working. Out of 168 available hours in a week approximately one-fourth are spent at work. Approximately another quarter are spent at sleep or in activities associated with going to bed and awakening. This leaves approximately half the hours in each week available for activities other than working or sleeping.⁸

The great significance of this span of available time, not devoted to working or sleeping, is that the working citizen of our society has almost half of his total time available for voluntary activities. Caught up in this large block of time are activities associated with recreation, eating, participation in voluntary associations, sheer idleness (including spectatorism in entertainment) and the like. In short, the time freed from working provides the opportunity for use of this time on a voluntary basis.

We are inclined to view with alarm the conformity of modern industrial man. The principle of the squeezed balloon seems to operate to release him from conformity. The squeezed portion of the balloon is the area of necessary behavior while working. But the process of squeezing the balloon here expands the non-restricted

⁸ A recent volume of readings deals with the many facets of the non-work life of Americans at mid-century. See: Eric Larrabee and Rolf Meyersohn (eds.), *Mass Leisure* (Glencoe: The Free Press, 1958). A companion volume, Bernard Rosenberg and D. M. White (eds.), *Mass Culture* (Glencoe: The Free Press, 1957) delineates the tremendous growth of popular arts as a source of activities or entertainment for a populace with leisure on its hands.

area of the balloon elsewhere. This is the analogy of the increased time available for voluntary activities.

There is ample evidence in the larger society that modern industrial man is making considerable use of this large block of free time for voluntary activities. The increase in the divorce rate can be interpreted as a form of voluntarism in the family institution. The persistent geographic mobility which sees approximately 1 in 5 citizens changing residence in the course of a year is another evidence of freedom in the area of voluntary choices. So is the tremendous growth of recreation in all its phases. The number of voluntary associations and the amount of time devoted to participation in them is an unmeasured index of still additional free use of time. In recent years there has been a vast expansion in consumer activities, exhibited by the rate at which consumer goods are purchased, as well as the increasing range of consumer goods entering into the daily life of the average citizen. Here again is evidence of a form of voluntarism with respect to the consuming institution.

I personally do not view with the alarm for the destiny of modern industrial man the evidences of conformity in his working life. Like the squeezed balloon he finds release for voluntary action in many other realms of waking behavior. Indeed, one can go a step further by suggesting that even at work industrial man intrudes voluntary behavior within the restrictive confines of the work place. Elsewhere I have suggested a model for analyzing the balance between necessary and voluntary behavior at work.⁹ At this point I simply want to point out that the voluntary behavior during work does not have work as its subject matter. This is both evidence of the fact that industrial man's voluntary life lies outside the productive institution, and also the fact that the conformity in behavior demanded by the productive institution is not complete.¹⁰

Our data about industrial life has served to clarify the nature of necessary human action. It has done so by showing the priority that technological considerations have over other considerations in determining working behavior. At the same time, the data about work reveals that the impress of necessary behavior is neither complete at work, nor does it carry over into the larger segment of time available for the working citizen where he has a consider-

⁹Dubin, *The World of Work, op. cit.*, pp. 303-306.

¹⁰Dubin, *The World of Work, op. cit.*, pp. 95-103; 300-303.

able measure of voluntarism in choosing his behaviors. This data demands revision in sociological theory dealing with necessary behaviors. It also demands revision in our theories of how the total social system is articulated, especially in the balances between necessary and voluntary behaviors. I hope I have at least suggested some of the lines along which the advances in sociology can go with respect to these problems.

PERSON AND ORGANIZATION

Why the current hue and cry about the individual oppressed by the work organizations or unions of which he is a member? The answer seems to be that as students of human behavior, and as educated laymen, we can observe everywhere about us the extent to which behavior as members of organizations is imperative rather than voluntary.

What is the underlying assumption involved in the view that industrial man is the captive of his employing organizations and unions? It is this: Man participates in all institutions of his life with equal intensity. This assumption sees man as moving in his daily round of life from one institutional setting to another, participating with equal enthusiasm and affective attachment to each. Thus, he moves from the productive institution or work to the family institution, to the recreational institutions, etc., making each institutional setting an intensive focus of interest while in it.

I submit that this is an inaccurate way of characterizing man's attachment to the institutions of his society. A more accurate model would be this: Most men have certain central life interests at any given time focused in one, or at most, several institutional settings. They have to participate in other institutions, but do so in terms of the behaviors required in them, and without reference to the voluntary choices that may be available in them. Thus the areas for voluntary social action are precisely the institutions that are central to a man's life interests and that are therefore at the focus of his attention.

With this formulation we can perhaps begin to understand the perfunctory character of much of social life and the apathy the citizen of modern society displays for many of its institutional facets. A man may go to church only on Sunday, or even less frequently on high holidays, carrying out the perfunctory obligations to the religious institution. He is part of the institution, but it is

not part of him, since he only fulfills the minimum required behaviors to publicly acknowledge his participation in it. It is curious that sociologists have not really focused on the problem of differential institutional participation in the life history of the person. It seems clear that with the kind of formulation of this relationship just presented we are able to grasp and comprehend the apathy of industrial workers for their companies, their unions, and their work. It is a startling fact of our studies of industrial workers that they uniformly reveal this apathy in a number of ways. This kind of data should surely demand the attention of sociologists as a body of facts requiring additions to our theories of institutions and institutionalized behavior.

The fact of the matter is this. Work, for probably a majority of workers, and even extending into the ranks of management, may represent an institutional setting that is not a central life interest for its participants. The consequence of this is that while participating in work a general attitude of apathy and indifference prevails. The response to the demands of the institution is to satisfy the minimum expectations of required behavior without reacting affectively to these demands. Thus, the industrial worker does not feel imposed upon by the tyranny of organizations, company or union. He is indifferent to this area of his life, considering it only a necessary part of his round of life, but not central in his interests. It is only the analysts, making value judgments about the "dehydrated" character of work, and fearing its consequences for the meaningfulness of life to industrial workers, who are alarmed by this problem. Bakke and Argyris, for example, write about "self realization" at work.¹¹ Self-realization may, however, be a matter of indifference to people for whom work is not a central life interest. Their self-realization comes in other institutional settings outside the productive institution.

What about those people in industry and commerce for whom work is a central life interest? These are the people who find the fulfillment of their life goals in work itself. They make the work institution central to their lives. The interesting fact is that for such people the work environment is challenging and rewarding.

¹¹ Cf. E. Wight Bakke, "The Function of Management," Ch. 8 in E. M. Hughes-Jones (ed.), *Human Relations and Modern Management* (Amsterdam: North-Holland Publishing Company, 1958) and Chris Argyris, *Personality and Organization* (New York: Harper & Brothers, 1957). Their general point about self realization in work is well taken for those to whom work is a central life interest.

This is another way of saying that an institution, when it is a central life interest for the person, is perceived as full of choices of behaviors, and opportunities for rewards to which the person is fully sensitive. The consequence is that he becomes a real striver in the institutional setting, securing many rewards and often encountering deprivations and frustrations. But this is no different from the man who experiences his family life as the institutional center of his interests. The point is that there is nothing about the organization of productive work, or the supervision of people while doing it, that is so antithetical to human personality needs as to result only in frustration and disappointment.

Elton Mayo began his pioneering studies of human relations in industry by examining the reveries of industrial workers. He conceptualized this as a means of escaping the "dehydrated" or depersonalized atmosphere of the workplace.¹² I would argue that a more inclusive conceptualization would be to conclude that the workers *never entered into* the work situation by making it central to their life interests. Their reveries were the continual, albeit imaginative, living out of their lives in institutional settings central to them while performing the necessary labor of industrial work.

The big point is this. Before we can use concepts of individual freedom, self-realization, satisfactions, and gratifications for the person, we have to ask what is his relationship to the specific social setting from which they are derived. If the social setting is one not central to his life interests, then he will participate in it as required (as is true in work) without expecting or needing these rewards to continue his effective performance. It is sufficient that the required behaviors be clearly specified, and that the payoffs (wages, fringe benefits) be readily apparent. He finds the rewards that sustain his personality integrity in other institutional settings central to his life. If this makes sense, then the argument is simple. We can now understand the data of indifference and apathy toward work and the organizations embodying it if we first understand the way in which persons are attached to the institutions in which they behave.

Work in our society does not appear to be a central life interest for a substantial proportion, if not a majority of our citizens. Their

¹² See: Elton Mayo, "Revery and Industrial Fatigue," *Journal of Personnel Research*, Vol. 3 (December 1924), pp. 273-281, and his "Day Dreaming and Output in a Spinning Mill," *Journal of the National Institute of Industrial Psychology*, Vol. 2 (January 1925), pp. 203-209.

apathy and indifference results from this. But this does not mitigate against their effective performance as workers so long as their required behaviors are adequately set forth for them and the incentives in the form of payoffs are calculable. This is the magic of social organization—the ability to sustain required behaviors even when the institution is not central to the actors' interests.

That this has implications for managing decisions is obvious. The broad struggle against apathy and indifference has been waged with a variety of personnel techniques designed to elicit loyalty and enthusiastic participation. The success of these techniques rests on the assumption that work ought to be a central life interest for workers. It becomes obvious that where work is not such a central life interest, then the techniques may be futile in making it so. Is this why personnel gimmicks proliferate at almost the same rate as styles in women's clothing?

INSTITUTIONS AND PUBLIC OPINION

One of the key problems in understanding the nature of social institutions is understanding their interrelationships. Our most enlightening literature here comes from the field of social anthropology where the interrelations among institutions of a culture is one of the primary foci of attention. Theory deriving from this source tends, in general, to give us a picture of simpler societies organized around a central institution like family, kinship, or moiety with the secondary institutions being coordinated with, but subordinated to the central institution.

When we come to a modern industrial society our descriptive literature seems to make clear that institutions tend to become highly specialized in their functions and to be bounded and distinguished by functional isolation from other institutions. The general mechanism that makes this distinctiveness of institutions possible is the growth of formal organizations, each performing a specialized institutional function. Thus the school system and schools developed to carry on education, the factory system and individual firms developed to carry on economic functions, and government bureaus proliferate at all levels to carry out political functions. Centering institutional functions in formal organizations has given rise to a whole new field concerned with organization theory whose very specialization makes clear the extent to which the focus of analytical attention has shifted away from the study of institutions, to a study

of the kinds of social groups that embody institutional functions.

Our present view of an institution is essentially one of aggregates of organizations carrying on similar functions within an institutional boundary. This gives rise to what may be a surface over-emphasis on the distinctiveness of institutions and a corresponding inattention to their interrelationships. Let me illustrate the problem of institutional dependency and interrelationships as distinct from the present way of emphasizing their discreet characteristics.

Schools educate the populace and business firms employ the citizens of the society to produce goods and services. These are distinctive institutional realms. Furthermore, they each have unique types of formal organizations to carry on the institutional functions: schools for education, business firms for production. An examination of the literature of industrial training at all levels reveals immediately that there is a very large volume, indeed probably a much larger volume than we currently suspect, of education being performed in business firms.¹³ Thus the education-production distinction is not, in fact, clear-cut as the evidence of training and education carried on in industry confirms. Furthermore, this is not a reciprocal sharing of institutional functions. Business firms are in education but very few schools engage in production.

What conclusions can we draw from examples of interinstitutional penetration taken from the industrial relations field? They may be summarized as follows: (1) Institutions are not unitary in the functions they perform. This is in accord with existing sociological theory. (2) The functions shared between institutions are selective. Institutions overlap for only a portion of their functions. (3) Functions may shift between institutions. As a consequence of automation, for example, many leaders in the industrial sphere are re-thinking training problems and considering the possibility that retraining displaced workers as well as training a new labor force to work with automation should be returned to the schools, if for no other reason than the costs involved. (4) The expansion of functions in a given institution appears to take place at a very conscious level. The whole industrial training movement is a self-conscious development with its own educational goals and body of educational doctrine governing methods of instruction and learn-

¹³ A recent attempt to survey the dimensions of industrial training is H. F. Clark and H. S. Sloan, *Classrooms in the Factories: An Account of Educational Activities Conducted by American Industry* (Rutherford, N. J.: Institute of Research, Dickinson University, 1958).

ing. (5) There appears to be a hierarchy of institutions in the focus of community attention at any given period of time. Some institutions are emphasized over others in the public's opinion. This hierarchy of institutions may not be grounded in a rational weighting of their relative functional importance. Institutional proponents, for example, may claim functional importance to command public attention, as schoolmen are now doing by elevating education to the level of a weapon in the cold war.

The concept of a hierarchy of institutions in a public view may become important in giving us a theoretical basis for determining which aspects of culture are lagging and which leading in social change at a given time. Ogburn introduced the concept of "cultural lag" as a way of describing the unevenness with which culture changes, illustrating the idea with changes in a given institution followed at a later date by necessary changes in other institutions.¹⁴ It seems obvious that a parallel concept of "cultural lead," focusing on those elements of institutions that are in the vanguard of social change, may be important to understand cultural lag.

The concept of "cultural lead" begins to suggest for us why particular elements of culture change so that others have to adjust to them. I am here suggesting that a prime requisite is public attention to a given institution. On the basis of such public attention justifications are developed whereby scarce resources can be allocated to undertakings not hitherto considered important enough to command those resources. The Manhattan project and its subsequent development of the atom bomb is a case in point. The advent of automation as a wholly self-conscious development is another illustration; so are concerns with executive loyalty, the organization man, and right-to-work legislation.

The productive institutions, industry and business, have been in the public attention for two decades. The Roosevelt revolution focused public attention on the productive institution, and our enduring social legislation was directly or indirectly concerned with the functions or outcomes of this institution. What is equally important is that those who guide the destiny of the productive institution, industrialists, corporate decision makers, and union leaders, have had to respond willy-nilly to the spotlighted position of that institution. The change was dramatic for them. The earlier conception of the industrial institution was that it was largely a privatized affair. This was given theo-

¹⁴ William F. Ogburn, *Social Change* (New York: Viking Press, 1922).

retical justification in a laissez faire policy which had the primary consequence of keeping public attention unfocused on the productive institution. If the best business decisions were private decisions and effective control of them was maintained by the market mechanism of competition, then public opinion and public attention was irrelevant to institutional functioning.

In the history of the United States this was further facilitated by other kinds of issues that captured public attention. These institutional problems included integration of millions of immigrants into the society, filling the vast geography of the country by expanding settlement westward, and meeting the challenge of exploitation offered by the fabulous natural resources available.

The great depression focused attention on the production institution as it ground to a paralysis. Industrialists generally reacted with a conservative stance, inveighing against this public attention by hoping for the return of obscurity in the public view. It is only on the contemporary scene that the leaders of business and industry have come to recognize the semi-permanent position of public attention which the productive institution now occupies. This has led to a great deal of soul-searching, and attempts at formulating the responsibilities of institutional leadership.¹⁵ Whatever else one may say of President Eisenhower's two administrations, it seems very clear that one of their great functions has been to confirm the fact that the productive institution will remain in the public view. By virtue of this industry is in the position of leadership with respect to institutional development and social change.

If we can characterize the Roosevelt revolution as having elevated the productive institution to the level of public consciousness, then we can also characterize the Eisenhower revolution as having effectively destroyed the opportunity to retreat back to a private and unmolested position among the institutions of our society. In short, the Eisenhower revolution has destroyed the conservative stance of industrialists. The decision makers of industry now have to assume the position of leadership in guiding the destiny of the productive institution because the spotlight of public attention will not move away from this

¹⁵ *Fortune* magazine has been one of the principal proponents of the new leadership responsibilities of American management. Such books as H. R. Bowen, *Social Responsibilities of the Businessman* (New York: Harper & Brothers, 1953), and its companion volume, M. W. Childs and Douglass Cater, *Ethics in a Business Society* (New York: Harper & Brothers, 1954) are serious attempts to cast up the accounts of business leadership, particularly as it affects the entire society.

institution. The simple conservative position that says, "leave us alone," is no longer viable. In the hierarchy of American institutions the productive institution now has a pre-eminent position. Those who make decisions about all aspects of the production of goods and services are, indeed, the new men of power because public opinion now accords to the productive institution the role of leadership in social change.

What I have just said about the analysis of the interpenetration of institutions can now be summarized. Our theory of institutional interdependencies and institutional change has been largely grounded in an implicit rational position. We have assumed that there is a best way for social functions to fit together and that institutional arrangements undergo transformation in a teleological sense while moving toward the best means of social arrangements. I think we may now perceive the possibility that public attention and public opinion play an important role in selecting out those institutions which display cultural lead in the society. When public attention is focused on an institution, and the behaviors it catches up, then this institution may move forward more rapidly in its development of functions than other institutions. It seems to me the role of public attention to institutional arrangements has not been accorded adequate importance when we focus on the problem of interinstitutional balance. "Cultural lead" may be the consequence of public attention, and "cultural lag" the consequence of public inattention.

INDUSTRY AND SOCIAL VALUES

The productive institutions have generated significant values that are now working themselves out in the larger society. I will discuss two central values of the industrial institution because they are substantively interesting, and because their analysis reveals the interaction of values and behavior in our society. The two central industrial values are *persistence*, and *interdependence*.

In classic analyses of the rise of capitalism, Weber and Tawney saw developments in other institutions, notably the rise of the Protestant ethic, as independent variables affecting the industrial institution.¹⁶ In our mature capitalism it becomes significant to inquire whether the productive institution has generated significant values

¹⁶ Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York: Charles Scribner's Sons, 1930) and R. H. Tawney, *Religion and the Rise of Capitalism* (New York: Penguin Books, 1947).

and systems of behavior that are now working themselves out in the larger society. I think it has.

Industry has moved from the position of being a dependent variable in the social fabric, dependent on developments in other institutions, to the position where it is now an independent variable in the society, influencing if not determining the character and structure of other institutions. There is a centrality to the industrial institutions in the operation of the whole society not previously accorded to it by social analysts. It can be argued, of course, that Marx and others gave the industrial institution its pre-eminent position as an independent variable in social change, and that therefore the centrality of industry is really nothing new. What I am more concerned in emphasizing is the fact that the industrial institution has had pervasive effects not only on its own development (which is the Marxian position) but also on the daily round of life of all citizens in an industrial society. The emerging values surrounding industrial work have generated new values surrounding the lives of industrial workers. The discipline of working in a factory or office has changed the behaviors of peoples in their communities and the rhythm of their community life.

The problem of productive work, at least in our society, is no longer that of subsistence and has not been for several generations. This is the affluent society in Galbraith's terms and its major problem is persistence, not subsistence. The dynamism of modern industry now seems to rest on full resource utilization, not profit-making alone. This means growth at least in proportion to the increase in resources (population, power, raw materials, markets, etc.) and preferably at a greater rate made possible by higher levels of consumption. Persistence is an underlying industrial value from which derives the motive power to make big business bigger, small businesses large, expand markets to world spheres, put two cars in every garage, etc.

If persistence is a fundamental industrial value, then we have to inquire, as sociologists, how it works its way out into the larger society. In the consumer spheres it leads to the development of credit policies permitting present consumption with delayed payments, the stimulation of consumer demands based on style changes rather than utilitarian considerations, and a widely held assumption that because the economic and social system are now so inextricably related, every effort must be made, through government or other agencies, persistently to keep the economy on an even keel or preferably on an

up-grade. The quiet revolution of government monetary and credit manipulations and the more drastic pump-priming through increased governmental expenditures for public works can be seen not so much as the triumph of a liberal economic policy as more nearly the consequences of the industrial value system; the persistence value of the industrial system permeating the larger social system. It is notable that many "industrial statesmen," among managers and labor leaders, are the most active proponents of devices to insure the persistence of the industrial dynamic. It is no longer meaningful to label such industrialists with classic tags like liberal or conservative. They are, perforce, industrialists *suis generis* who apply the values of productive institutions to the larger society.

An emerging American value of tremendous significance for industry, originating in the industrial institution but also permeating the whole society, is this value of societal success displacing the value of individual success. I say displacing advisedly. The measure of individual success is no longer only the accumulation of personal wealth exhibited through conspicuous consumption. An additional test is that of contribution to the persistence of a high level economy.

A second value related to that of persistence of a high level economy is the growing belief in the interdependence of the institutions making up the social fabric. This belief in the inevitable interdependence of industry, government, family, religious, military, and recreation institutions, to mention only the more obvious, has had the effect of focusing on institutional interdependencies as a major concern of policy makers in all walks of life. For example, it does make a difference to industrialists who will employ them as workers whether Negroes get adequate education, making it both possible and logical for industrialists to accept integration in schools as well as in their plants. It makes a great deal of difference to labor unions whether their members have adequate medical facilities for themselves and family members since this is an area in which a direct pay-off can be made to members through collective bargaining. Employers recognize the interconnections between family health and living, on the one hand, and work, on the other hand, and have not been entirely reluctant to accept and support health and welfare and similar fringe benefits in collective bargaining.

I have illustrated two underlying values of our industrial institution. Both derive from habituation to business operations and are logically congruent with them. To put it most colorfully we can

summarize these values as follows: A factory is no damn good if it isn't running; and whether it runs or not depends on conditions exterior to it. These are direct restatements of the *persistence* value and the *interdependence* value oriented towards the production institution.

Here now is the analytical problem. How do values come into being? How do they become stabilized within a given institution? What are the mechanisms by which they extend beyond the given institutional setting into others? These are clearly subjects for sociological analysis. The data of industry suggests a very fruitful body of knowledge which, if analyzed, will give us new insights into theoretical explanation of the phenomenon of values. Outside of such classic studies as Weber's and Tawney's and such excellent historical studies of changing norms as Bendix's and Wyllie's, we do not have adequate theory to handle the problem of values.¹⁷

Before trying to predict what such theory might look like let us consider some specific examples of consequences of these values. The current concerns with individual freedom within the organizational straight-jackets of company and union take on new meaning in the light of these values. The persistence value for either organization places in the hands of management and union leadership decisions made for and on behalf of the continuity of organization. Mr. Whyte's "organization man" is so because the continued persistence of the organization is a value higher than that of individualism. The dictatorship of unions over the working destinies of their members is similarly viewed as a legitimate pursuit of organization as over against individual goals. The organization man and the union member as organization automaton are the logical consequences of the value of persistence. Furthermore these two outcomes are buttressed by the interdependence value. For the business organization the team and team player who knows his place, his specialty, and his interdependence with other members of the team, is more valued than the individualist, however brilliant his potential contribution might be. The individualistic worker who may upset the solidarity of the union viz a viz management, is a similar threat because of the dimly perceived interdependence among workers to maximize their bargaining strength. Thus it becomes possible to characterize some of the central problems of man in organization in terms of the underlying dual values which arise out of behaviors in our industrial institution.

¹⁷ Reinhard Bendix, *Work and Authority in Industry* (New York: John Wiley and Sons, 1956), and Irvin G. Wyllie, *The Self-Made Man in America* (New Brunswick: Rutgers University Press, 1954).

Parkinson has satirized the persistence value in modern organization, the satire being all the more trenchant because of the underlying reality it portrays.¹⁸ Academic students have illustrated the working out of the persistence value in business organizations and in labor unions. Their studies make clear that market mechanisms of competition, however decisive they may appear to operate, are not the sufficient condition of organization survival. Among organization participants, there develops out of the logics of daily operations and the pressure of past investment of resources, a belief in the value that persistence of the organization is itself a goal.

The interdependence value is expressed everywhere about us. Labor is in politics, so is business. The military institution consumes a major share of the national product and decisions have become too important, for international relations as well as the national economy, to be left to the generals. The entire citizenry is being called to arms to support significant changes in our common schools because it affects the quality and allocation of our human resources in adult productive work. The "company wife" has become a preoccupation of at least some business concerns as an obvious bow to the interdependence between working and family life. Unions have become welfare organizations with some even attempting to embrace the entire round of life of their members. Market competition among business firms is as much concerned with increasing the total market for a product as with driving competitors out of business. The arts have become a weapon in the cold war (through cultural exchanges) as well as handmaiden of the industrial designer. Philanthropy on a scale unique in world history becomes a national policy as an instrument of economics and politics through our economic aid programs to foreign governments (remember when the slogan, "a quart of milk for every Hottentot" once characterized the foolishness of national philanthropy?). We could multiply examples endlessly. The point seems clear. Interdependence is a central value of American life.

What can we conclude from these examples that tell us something about the dynamics of the origin of new values, their spread and final dominance in an institution, and in the larger society? In each of these examples it seems apparent that the behavior becomes systematized in terms of specific and uncoordinated norms guiding the behavior. There then gradually unfolds a generalization of these specific

¹⁸ C. N. Parkinson, *Parkinson's Law and Other Studies in Administration* (Roston: Houghtin Mifflin Co., 1957).

norms into a broad over-arching guiding value which is logically consistent with the individual norms, and a summary of them. When these over-arching values finally become articulated they serve the purpose of giving meaning and goals for the complex behavior systems out of which they have been derived.

Thus I would suggest that a possible theoretical formulation of the relations between values as goals for behavior, and behavior itself, is that the former grow out of the latter. Behavior, in turn, is the product of the functional logics of a given institution. It is customary to assert the success motif as a central goal of American society and to view behavior as a product of it. I am now suggesting that industrial behavior guided by the logics of industrial production has, in fact, given rise to new social goals that are at least coordinate with the individual success motif.

The dynamics of value formation may be from behavior to a rationalization of goals, rather than the more customary formulation of goals as the guides for behavior. It may be thoroughly worthwhile for sociologists seriously to address themselves to this kind of problem and perhaps even to consider the dynamics I have just outlined as the theoretical model.

* * *

Students of industrial work have now provided for sociologists, and perhaps other disciplines as well, an important body of facts hitherto unavailable. This is a challenge to establish disciplines to take cognizance of this data, either by bringing it within the explanatory scope of existing theory or by developing theory adequate to the data. This is an exciting challenge which students of industrial life can be proud to make of their academic colleagues. There was a time when sociologists were implored to study industry on the assumption they had special contributions to make. The situation, to put it bluntly, is now reversed. Our accumulated knowledge about industrial life insistently demands that any discipline dealing with this subject matter prove its ability to make sense out of it, or abandon the effort. Industrial researchers currently have the initiative and it remains to be seen whether established disciplines like my own of sociology are capable of meeting this challenge. I think sociology will rise to this challenge and be immeasurably enriched because of it.

Part VI

**CURRENT CRITICAL ISSUES
IN WAGE THEORY AND PRACTICE**

WAGE POLICY AND BUSINESS ACTIVITY

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This topic cuts two ways: how general business activity shapes union wage policies, and how those wage policies influence the behavior of the economy itself. Both formulations pose the central issue in wage theory today: whether the level of wages is primarily externally given, as the resultant of political forces; or responds primarily to forces operating within the economic system. In my judgment wage policy is still far more a resultant of economic processes than it is an independent variable. However, there is an autonomous element: the problem is to detect it.

In the American economy wage decisions under collective bargaining are highly decentralized. Very often they are made at the single-company level, although both parties will naturally consider competitive relations among firms in the same product market. In consequence, local factors play a large role, so much so that we cannot accurately speak of a single national wage policy, even though common national influences such as the cost of living exert some general leverage in the making of wage decisions.

Taken in the large, union wage policies embrace certain common goals. (1) *Income*. All unions try to achieve general increases in wage rates and to resist general reductions, in the dual hope of expanding both money and real wage incomes. (2) *Plant wage structure*. Industrial and mixed unions have a keen interest in recurring upward adjustments of selected job rates, to reconcile conflicts between skilled and unskilled or seniors and juniors, or to gain a share of increased productivity arising on certain jobs from installation of new equipment, or to effectuate workers' ideas of equity and fairness in internal rate relationships. (3) *Interplant wage uniformity and differences*. Within the relevant product or labor market, craft and industrial unions alike usually seek uniform rates for comparable jobs, partly in the belief that this reduces the importance of wages in cost competition and partly because for employees uniformity coincides with fairness in the external sense. Exceptions exist where union leadership thinks that wage differences must be conceded to protect employment of members in locals attached to weak firms. Where technical circumstances permit it, some unions have combined the

goals of uniformity and difference by use of piece rates, as in the garment trades.

(4) *Control of working time.* Unions generally have achieved premium pay for overtime hours and for night, weekend, and holiday work in pursuit of three main objectives: to reduce hours as such, to compel socially more acceptable scheduling policies, or on occasion to raise take-home wages where hours are difficult to cut. (5) *Income-protective devices.* Since 1940 unions have diverted much money from potential increases in basic rates to fringes such as health insurance and sick pay, longer paid vacations, retirement plans, and supplemental unemployment benefits. The main purpose here is to stabilize income when work is interrupted, while the multiform character of these benefits reflects efforts to reconcile conflicting interests of juniors and seniors.

Three variables—employment, profits, and the cost of living—are obvious links through which changes in economic activity can lead to changes in wage policy. However, the closeness of the linkage varies with the specific elements of wage policy, and also with the speed and direction of economic change. Negotiated wage rates, for example, are probably more sensitive to changes in the economic climate than are fringes involving either overtime penalty rates or income-protective devices, although the operation of *existing* fringe items clearly affects wage costs when changes in output occur. By contrast, the introduction or increase of fringe benefits bears no close relationship to minor swings around the trend of economic advance. Rather, the fringes as a whole are mainly the indicia of the affluent society we have been acquiring with some 16 years of high and expanding employment. Sustained prosperity has undoubtedly both induced and permitted that revolution in the social status of the unionized industrial worker for which the phrase “fringe benefits” is now a poor synonym. However, the victory of the doctrine of the plant as a community, in which wage supplements play so prominent a part, is more a triumph for industrial unionism itself than it is the off-product of economic forces alone.

Regarding basic wage rates, movements in the level of business activity are probably not very important for narrower adjustments in intraplant and interplant differentials, where the main motivations are institutional and political. This brings us to general changes in negotiated wage rates.

One point is clear at once: union wage rates are not responsive to declines in general activity. Unionism has introduced the “no cuts”

principle over strategic sectors of the system, extending and reinforcing the natural sluggishness of wage rates when demand for labor drops. In the absence of a severe depression, this rigidity is permanent. It provides a wage-ratchet mechanism that permits only one-way changes in job rates. In turn this contributes to inflationary bias, since each recovery must start from a higher level of wage rates than the one previously. Today the "going annual increase" is the rule even for downswings, although negotiated increases show greater dispersion at such times, dampening the general rate of advance. At the extreme are those cases of severe local distress, as in parts of the shoe and textile industries in the later forties, where zero increases were negotiated or awarded.

During upswings of the short cycle the restraints imposed by economic forces become reversed. Annual general increases in going rates will be larger as prospective profits and derived demand for labor improve. Here I would agree with Dunlop that the tie between changes in expected profits and changes in basic rates is direct but rather loose, becoming more taut during expansions.¹ If in the later phase of the advance the cost of living starts upward, it will exert a direct although lagged influence upon the rise of basic rates, even continuing after the crest of the expansion has passed. The role of both profits and the cost of living shows up quite clearly in the strong upward surges of wage rates during 1941-43, 1945-48, 1952-53, and 1956-57.

By contrast, *general* movements in employment and unemployment do not seem to have had much influence upon wage policy over the past decade and a half, save perhaps for periods when aggregate demand was clearly excessive, as in World War II, 1946-48, and the Korean War. Because our system of collective bargaining is so decentralized, it is much more responsive to economic factors local to the bargaining zone—profit prospects of the employers and employment-unemployment in the particular industry or trade. The exception here is overall movements of the cost of living, which, unlike the national unemployment rate or the trend advance in general labor productivity, have real and understandable significance to union members everywhere. Since the national rate of unemployment has no close connection with local labor markets in a high employment economy, it is not decisive for wage negotiations. On the contrary,

¹ John T. Dunlop, "Wages Policy and General Economic Policy" (unpublished), May 1958.

serious local unemployment is a restraint, while tightening of local supply encourages wage increases. This lack of significance for national unemployment in local wage determination naturally casts doubt upon the strategic effectiveness of a minimum national rate of unemployment for controlling the rise in wage rates, let alone wage costs.

Although the question requires more extended inquiry, economic activity probably exerts its greatest leverage upon wage policy through changes in expected profits, in the cost of living, and in local conditions of employment and unemployment. For the short cycle, profits and local unemployment operate as restraints during declines, but rarely are they strong enough to block general rate increases entirely. At most they slow the rate of increase. Widespread adherence to the no-cuts doctrine offers clear evidence of the autonomous role of union wage policy, making unemployment short of intolerable levels a weak variable for controlling the behavior of wage rates. For upswings, profits, the cost of living, and local employment conditions all operate as propulsive forces for moving wage rates upward, also encouraging larger wage supplements. Thus there remains a causal connection between economic activity and wage determination. Negotiated wage setting is not exclusively determined by noneconomic or political factors; accordingly there is still a place for the general theory of wages within the larger body of economic analysis. On the same count, the modern notion that wage behavior over the whole economy is now shaped by "administrative" wage and price decisions by a few large unions and monopoloid employers in a few key sectors cannot be accepted until it is confirmed by careful testing.

A final point about the causal importance of movements in general activity concerns not wage policies but wage costs. The wage bill of the firm is the product of wage rates, the job distribution of employees, the extent of overtime working, and the range and character of the other fringe supplements. For larger aggregates the wage bill and gross average hourly earnings will also reflect the weighted distribution of employees as among high and low-wage firms and industries. Recent inquiries by Bent Hansen and others² have noted a sharp divergence between movements of pure wage rates and of wage costs—the "wage drift." During upswings, both wage earnings and wage

² Bent Hansen and Gösta Rehn, "On Wage Drift: A Problem of Money-Wage Dynamics," in *Twenty-five Economic Essays . . . in Honour of Erik Lindahl* (Stockholm: Ekonomist Tidskrift, 1956), pp. 88 ff. See also Dunlop, *op. cit.*

cost will outstrip average wage rates, because of increased overtime, increased incentive earnings, impacts of new equipment upon particular job rates and earnings, promotions and merit increases, more liberal fringe benefits, and probably an employment shift toward higher wage firms. In downswings some of these factors will work in reverse, particularly those linked to output and working hours. More important, although union wage policies enhance the wage drift, *changes* in those policies are not the primary reason for the drift itself. Its main thrust flows from changes in output, working hours, and investment—a fact of decisive relevance to any strategy for preventing inflation by control of wages. To succeed, that strategy must embrace not wage rates alone but wage costs as a whole, essentially by restricting output and investment.

At this point we can turn the main question around and look at the impacts of union wage policies upon general economic activity. Immediately this projects a new problem: unionism as an independent force that may alter wage behavior, both by reshaping its responses to economic change and by introducing autonomous (noneconomic) influences affecting that behavior. In turn, the autonomous element leads directly to the specific problem of cost-push inflation.

Unionism has reshaped the response of wages to changes in labor supply and demand in two major ways. First, the no-cut policy strengthens the resistance of wage rates and, to a lesser extent, wage costs to declines when labor demand drops. For those of us who prefer a secularly stable or a slowly rising price level to a declining one, this increase of downward wage rigidity is desirable. However, it does not follow that unionism similarly reduces the upward plasticity of wage rates. Finite intervals between contracts do make wage changes somewhat more discontinuous, but the spread of automatic adjustment formulae (escalators, improvement factors, annual step increases on long-term contracts) and of reopening clauses works to diminish the importance of contract lags. Moreover, while non-union wages also have downward rigidity, they are probably more sluggish upwards because there is less immediate pressure on employers to raise them. The market, rather than power forces, must do most of the job.

Second, through the growth of wage supplements unionism has greatly complicated the nature of wages, making “the price of labor” no longer the simple thing it once was. Wage increases today are not merely a matter of job rates, but include supplements that are partly mandatory and partly contingent, partly available at once and

partly deferred. Deferred benefits such as pensions and layoff pay add immediately to labor costs but as income have a deferred impact upon effective demand. Overtime premiums increase the wage drift during expansions, also adding to labor costs.

By stabilizing wage costs on the downside, unionism helps prevent a falling price level. In turn this helps sustain consumption, giving some indirect support to investment. If, however, unionism promotes a rise of wage costs, then in expansions accompanied by tight money it may restrict real investment by helping to raise the prices of investment goods—by what Ruggles calls a “reverse Pigou effect.”

The crucial question is whether unionism actually has accelerated the postwar rise in labor costs, thereby imparting a cost-push to the system.

Observers such as Friedman reject the wage-push by appeal to evidence about the relative wage movements of union and nonunion groups. The many studies in this field indicate relatively little wage advantage for unionism. If unions have not permanently altered the wage structure, then supposedly they have not raised the wage level. But this need not follow. In times of protracted relatively high employment the independent force of unionism may well be masked by induced shifts of labor supply in the nonunion sectors—actual withdrawals as with farm labor during the war, higher reservation prices of unorganized workers as opportunity costs rise, and voluntary wage increases by nonunion employers in subjective expectation of adverse supply shifts and in fear of unionization. Sustained high employment works to offset the “Hicks effect,” which depends upon a disproportionate rise in the prices of union-made products to bring about an exodus of unemployed workers to the nonunion sector.

Furthermore, there is indirect evidence to indicate that unionism may exert upward pressure on the wage level, even though it does not show up in distortion of the wage structure. As Slichter has shown, postwar industrial unions have won the union shop in some very tough industries, also achieving major breakthroughs for pensions and supplemental unemployment benefits, as well as usually leading the annual parade of substantial wage increases.³ To these we should add demonstrated ability of unions generally to obtain “going” annual increases, even in recession years. Finally, Ruggles has noted

³ Sumner H. Slichter, “Do the Wage-Fixing Arrangements in the American Labor Market Have an Inflationary Bias?” *American Economic Review*, Papers and Proceedings, Vol. XLIV (May 1954), pp. 322–346.

that for 1950-56 corporate profits have fallen as a percentage of wages and salaries in all years except 1955, which suggests a wage-push rather than a demand-pull and yet at the same time puts in some doubt the notion that administered prices lie back of the postwar inflation.⁴

However, there is an alternative line of argument for the demand-pull version, put forward by Friedman, Morton, and others during 1946-51.⁵ On this view the money supply feeds expanding aggregate demand, which in turn becomes generally excessive, drawing up prices and, with them, wages. As the wage level rises it exerts cost pressure, at the same time adding to disposable income and consumption demand. Union wage-raising then becomes far more the effect than the cause of inflation, while through contract lags it may actually slow the rise in the wage level.

This reasoning has appeal but it is not invulnerable. For 1942-48 it affords a tenable explanation of major wage movements. For 1950-58 the situation seems to me quite different. Save for 1951, which was a year of rapid wartime expansion, aggregate demand has not been excessive, although bottlenecks did appear in a few sectors of capital goods production during 1955-56. For the nine years as a whole, however, gross demand actually fell in two, failed to increase at all in one, and increased only very moderately in three others. During 1956-58, profit margins were either stable or falling, instead of being drawn up by aggregate demand, while at no time during the recent boom did demand press closely against capacity in the consumer goods sector. For the period as a whole, straight-time hourly wages in manufacturing rose consistently, although they varied sharply with the general rate of expansion. For both consumer and wholesale prices the big surges came in 1950-51 and 1955-56. In the former period the main factors in their rise centered in raw materials and in increased profits, while in 1955-57 the principal reasons were increased wage costs and, after 1955, a striking decline in the annual

⁴ Richard and Nancy D. Ruggles, "Prices, Costs, Demand, and Output in the United States, 1947-57," in *The Relationship of Prices to Economic Stability and Growth*, 85th Cong., 2d Sess., Joint Economic Committee (Washington: GPO, March 31, 1958), pp. 298-302.

⁵ Milton Friedman, "Some Comments on the Significance of Labor Unions for Economic Policy," in *The Impact of the Union*, David McCord Wright, ed. (New York: Harcourt, Brace, 1951), pp. 204-234; Walter A. Morton, "Trade Unionism, Full Employment and Inflation," *American Economic Review*, Vol. XL (March 1950), pp. 13-39.

increase of labor productivity in manufacturing in particular and in the private nonagricultural sector generally.⁶

The whole period since 1950 presents a mixed story of two distinct surges in prices and wages, a brief episode of excess total demand in the opening phase of the Korean War, inadequate effective demand during most of the period, a tendency for the price level to creep upwards, an uneven but sustained upward movement in wages, and sharp fluctuations in the annual rate of advance in labor productivity. Also noteworthy were the offsetting decline in farm prices between 1952 and 1956 and the continuous rapid rise in the prices of consumer services and government product, where wages and salaries are the main element in cost and unionism is ineffective or nonexistent.

While it is true that excess total demand was central to the price surge of 1950-51 and excess local demands were important for bottlenecks in certain capital goods sectors during 1955-56, the demand theory breaks down as a sufficient explanation of inflation in recent years. At the same time, while there is evidence that unionism has exerted a more or less continuous wage-push in certain areas of the private sector, it would be an egregious error to lay the entire blame for price inflation at the door of union wage policies. Finally, if the growth rate of the economy could be increased and made somewhat more stable, the labor-productivity offset could do a much better job of containing union wage pressure.

Assuming now that we want continued growth, and conceding that unionism adds something to price inflation, what is the worth of various strategies now offered for dealing with the inflation problem?

1. *Atomization of unions.* This proposal contemplates alternatives such as prohibiting industry-wide bargaining or limiting unions to single employers, perhaps by legislation blithely extending the coverage of the antitrust laws to presently exempt areas of collective bargaining. Apart from the very dubious wisdom of bringing almost the whole of collective bargaining under the control of the courts, this approach rests upon a false premise: that greater decentralization of bargaining means lessened wage pressure. Dissolution of industry-wide employer associations by no means necessarily implies this result; in fact it has yet to be shown even that association bargaining

⁶ Otto Eckstein, "Inflation, the Wage-Price Spiral and Economic Growth," in *The Relationship of Prices to Economic Stability and Growth, op. cit.*, pp. 364-367; *Productivity, Prices, and Incomes*, 85th Cong., 1st Sess., Joint Economic Committee (Washington: GPO, 1957), pp. 142-143.

actually accelerates the rise of wage costs. Dissolution of market-wide unionism means increase of interunion competition and leadership rivalries, and carries even less promise of wage stability. It would promote competition for wage gains, permit the most profitable firms to become pace-setters, and compel unions in the weaker firms to follow along as a political necessity, sacrificing the stabilizing force of market-wide unionism because the leadership could no longer take an overall view. For the inflation problem, atomization of unions is clearly a false trail to a solution.

2. *Government wage control.* This approach can be dismissed on three counts: It would lack the popular support indispensable to its effectiveness. It would also require price control and would lead straight into an economy regulated in detail. It would bring about an arbitrary, haphazard, and irrational wage structure, sacrificing both flexibility and incentive; and it would invoke formidable problems of enforcement that its proponents airily dismiss with a wave of the hand. Here is another blind alley in the search for solutions to the inflation problem.

3. *Monetary and fiscal restraint.* The underlying premise here is that inflation is induced by effective demand, which must be restrained sufficiently to create a margin of unemployment and unused capacity adequate to check the rise of both wage costs and prices. Its advocates hope that this will be possible at high levels of employment and output. This remains to be proved—certainly the relatively low-pressure economy we have had most of the time since 1950 offers little assurance that mild restraint will do the trick. Only in recessions has the rise in straight-time hourly earnings been markedly cut down. This suggests that effective restraint would have to be quite severe, to check both the wage drift and the general advance of wage rates and supplements. Severe restraint would also reduce the annual rise in labor productivity, by curtailing investment in new plant and equipment and by imposing higher unit costs with outputs well short of capacity. Thus it would not dispose of price inflation; indeed, it might make it worse.

Admittedly monetary and fiscal policy has overall importance and can take different forms. If severely restrictive it poses the question whether we want an economy in or on the verge of a recession, relieved briefly from time to time by weak booms that soon flicker out. How much output and sustained growth are we willing to sacrifice in a possibly vain quest for price stability? Is the choice so obviously in favor of stability at the cost of a serious and concentrated income loss

for the unemployed, where the alternative is greater output and growth quite possibly obtainable at the cost of a modest annual "tax" levied by 1 or 2 percent inflation? Welfare theory offers no obvious answer. In politics the answer is already clear and it is negative.

4. *Promoting more investment.* There is much force to the argument that since Korea we have tolerated an inadequate rate of growth that in turn has crippled the ability of increased labor productivity to offset more fully the wage pressure of modern unionism. If so, the problem is to increase the inducement to invest, by keeping effective demand closer to overall capacity and by greater use of tax incentives. This does not eliminate monetary policy by any means. Instead it suggests that it should be more expansionary, even at the risk of creeping inflation. This strategy runs some chance of accelerating wage pressure along with the productivity offset, but we have much yet to learn about this question. It is wholly possible that the inflation problem would be no worse than it has been in recent years, while it can hardly be denied that overall utilization and growth would then be more compatible with America's responsibilities in today's dangerous world.

The problem of creeping inflation is indeed important. However, it is no more intrinsically important than the problem of adequate and well-sustained growth in output. Even on its own terms, inflation is by no means solely a problem of union wage policies. Even more, inflation is not solely a wage problem *per se*. Why, then, contemplate approaches that are disruptive for industrial relations or likely to fetter needed growth, in the mistaken notion that inflation is mainly or entirely a union problem? Cures that promise so little and threaten so much are worse than the disease itself.

WAGE-PUSH INFLATION

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Inflation may originate from excessive demand or from a rise in costs and may therefore be called either demand-pull or cost-push inflation. Wage-push is a part of cost-push. This concept implies that inflation is caused by a general rise in costs, which in turn is the primary cause of the other inflationary factors such as an increase in the quantity of and velocity of money, the speculative fever, the fear of creeping inflation, the preference for common stocks and real estate, and higher demand for durable consumer goods, for larger inventories, and for increased investment in plant and equipment which results from the expectation of rising prices. Higher costs must cause higher prices because business must recoup such costs or cease production. Moreover, whoever is responsible for higher costs, whether labor or other factors, is therefore to blame for inflation and all of its consequences and manifestations.

Cost-push inflation is a recent idea whereas demand-pull inflation is traditional. In classical economic analysis, costs are used to explain the relative prices of individual commodities, but they have not been generally used to explain changes in the level of prices, which have been attributed to monetary factors operating as an independent variable.

Demand-pull and monetary inflation are therefore similar concepts. They depict, moreover, the only type of inflation ordinarily consistent with a perfectly competitive society. For in such a society no person or group can exert a significant influence on product prices or on wages. There can be no administered wages or prices and no one can influence national monetary policy. The level of prices in a competitive society consequently is conceived to be caused by forces lying outside and beyond the actions of individuals, primarily the quantity of money. The remedy for inflation is held to be appropriate monetary and fiscal policy, to which individuals are presumed to adjust themselves because they have no power to cause monetary policy to adjust itself to their needs and desires. Gold, money, or the monetary authority is accordingly conceived to be a restrictive device to which individuals must perforce accommodate themselves and which they cannot change. Hence we hear of the "tyranny of gold" or a monetary policy which is the "master" and not the "servant."

In contrast, the concept of cost-push inflation itself implies that our society has a large element of monopoly, without which no one could exert any appreciable influence on his own prices or the price level. Under cost-push inflation, on the other hand, prices rise because costs have risen as a result of the collective action of labor unions and businessmen. Such a rise in costs is the initiating force in price increases and not the result of a rise in demand. Prices must be raised to cover higher marginal costs and more cash working capital must be provided by increasing the quantity of money. If banking policy does not permit this to happen, output and employment fall. To prevent this result, the monetary authority must adjust its policies to permit rising costs and prices. The central bank is not the master of the situation but the servant of pressure groups. If the central banker refused to sanction and promote the inflation caused by labor and business policies, he is blamed for the resulting unemployment. Unlike during the days of the gold standard tabu, the monetary authority is asked to adjust itself to business and labor even if it involves depreciation of the currency—because it is presumed that business and labor either cannot or will not adjust themselves to a monetary policy of price stability. This concept of policy, together with its corollary “creeping inflation,” I reject. High level employment is fully consistent with price stability.

It is now generally agreed that the immediate postwar inflation and that occurring after the outbreak of the Korean War must be classified as demand inflation, although at the time, under the pernicious influence of the so-called income theory of prices, some erroneously interpreted it as a mere wage-price spiral, one version of cost-push.¹ The period 1951 to the fall of 1955 was one of price stability, created in part by a fall in agricultural prices. Since 1956, however, prices have tended to move upward again. It is, however, during the entire period since 1951 that cost-push inflation allegedly has been effectively operating. The fear that trade unions would create either cost-push inflation or unemployment has, however, existed throughout the whole postwar period.

Labor and management have vied with each other in placing responsibility for this inflationary tendency. They thus both acknowl-

¹ Walter A. Morton, “Trade Unionism, Full Employment and Inflation,” *American Economic Review*, Vol. XI, No. 1 (March 1950), pp. 13-39, and Walter A. Morton, “Keynesianism and Inflation,” *J. P. E.*, Vol. LIX, No. 3 (June 1951), pp. 258-265.

edge cost-push to be a fact, and to remedy it each would reduce the power of the other. Wage-price data has been presented contrasting wage increases with productivity and profit rates. Labor finds the source of evil in administered prices, and management in excessive bargaining power of trade unions. Despite this implicit agreement of labor and management, it would be an error to assume that all inflationary forces are now and have been of the cost-push variety and the demand-pull forces have been entirely absent in recent years.

The period since 1951 has been one of heavy investment financed in part by an expansion of demand deposits and currency of about \$20 billion. This expansion could furnish the fuel for a demand-pull inflation unless it is viewed as itself a result of a previous cost-push to which the banking system responded. In some areas building has been in such demand that some builders have paid in excess of the union scale for skilled workers. The federal government has spent billions for defense, and practically all of this expenditure is price-inelastic, prices being limited only by competition. Such expenditures invite higher prices and higher wages which in turn influence the whole market structure. But more significant than any of these factors is the fact that much capital goods expenditure is price-inelastic within a moderate range, and that it has been possible up to 1956 for manufacturing industry to pass along to a willing market increased costs that management has incurred in collective bargaining without putting up much more than token resistance to excessive wage demands. Finally, it seems that everywhere in the world population is rising, and the populace is seeking to live better than it can produce, to spend without earning, to borrow and to inflate. These tendencies cannot easily be arrested.

Although conclusions regarding the causal factors at work would require analysis of statistical and empirical data which I have not made, I doubt whether any simple method of correlation of wages, productivity and prices, or lead and lag analysis, would provide definitive conclusions. However, relying on the wage gains made by the collective bargaining process, of rising cost factors, and of market movements, I am inclined to believe that cost-push has been actively present since 1951 and that wage-push has been an important, though not the only, factor in this cost-push. Among the others are increased depreciation charges, heavy research and development expenditures, and probably higher proportions of salaried workers, all of which are taken into account in full cost pricing policies. It is possible, however, that some of the capital charges and research expenditures may pro-

duce decreased costs in the future, whereas higher wage rates are in themselves conducive to a permanently higher cost level.

Without assessing praise or blame, it seems clear that the wage increases granted since 1951 could not have been absorbed by management without seriously impairing or wiping out profits. Management contends that wage costs have been rising faster than productivity in the economy as a whole, and the data appear to support this conclusion. With rising costs, management had no alternative but to raise prices, or to reduce profits. Since the rate of profits generally has not risen during this period, it follows that higher prices were necessary in order to pay the higher wage rates. Does this fact make labor responsible for the inflation?

Three so-called proofs of responsibility for inflation have been adduced. They are proofs based, first, on the existence of the wage-price spiral, second, of a rise in wage rates faster than productivity, and third, of statistics attempting to show causal relation by time sequences, that is, to show which came first, the rise in wages or the rise in prices. It is, of course, obvious to economists that the cause of inflation cannot be found merely by showing the existence of a wage-price spiral, or by showing that wages have risen faster than productivity. Neither can it be found by trying to trace statistically whether the rise in prices or the rise in wages came first.

In my view, these data are of little value in enabling us to find the causal relations as distinguished from simple statistical coincidences or correlations. For inflation could arise out of a common cause, such as an increased money supply, lying outside the orbit of the statistics and of which the statistics are the result.

This is true because in every inflation, even a demand inflation caused by rapid expansion of the currency supply, there will be a wage-price spiral; that is one of the mechanisms of inflation, not its cause. Money wages may rise faster than physical productivity; that is a definition of an inflationary condition, not an explanation of its cause. Prices may rise first or wages first, but that itself is inconclusive as to causation. This is shown by the recent announcement of General Motors that its 1958 wage agreement was not inflationary since it had decided to raise prices because of the expected increase in wage rates. Here the price rise came first, the wage increase later, but still the cause of the price rise seems to have been the expected increase in labor costs.

The same mechanisms of inflation are present in demand-pull inflation as in wage-push inflation. We must therefore go back of these

mechanisms and their statistical counterparts to find causes. That productivity has risen more slowly than wages indicates that the higher wages could not have been paid without higher prices, but it does not settle the question of causation.

During hyper-inflation the wage-price-income spiral operates with a vengeance, and increases in wage rates outpace rises (if any) in productivity, but who would say that such statistics prove that labor unions and not the printing press are the real cause of inflation?

It is nevertheless my view that wage-push has been an important factor in the recent inflation, but I also believe that demand factors have played a part. If wages were pushed up rather than pulled up by demand, they must have been pushed by collective bargaining. Still, the demands of the unions could not be effective unless agreed to by management. Moreover, higher wage rates can cause higher costs to the firm or the industry, but they can only cause inflation if the public agrees to pay higher prices and the monetary authority makes the money available for them to do so. Wages rising at a faster rate than productivity can be granted by management only if it is willing to risk consumer resistance at the higher price level—something that many firms have seemed quite willing to do.

When we seek responsibility for wage-push inflation, it is clear that the responsibility is a joint one: labor is responsible for asking, and management is responsible for granting the inflationary wage requests. This holds for large scale industry which to some extent sets the wage pattern for other parts of the economy to whom the newly determined wage rates are a cost which they must meet to be competitive in the labor market.

A clear example of cost-push without causation is found in the public utilities. In this field mere demand for service does not raise the price. It must be raised by public authorities who operate on the cost-of-service principle. Here, higher wage and material cost are clearly the cause of higher prices. This does not, however, indicate that the workers in public utilities necessarily have used excessive bargaining power unless it can be demonstrated that their remuneration is above the competitive level and out of line with that established in the job market as a whole. It does not follow, therefore, that cost-push inflation in any industry necessarily indicates that wages are too high in that industry as measured by the competitive standard. Cost-push may be merely the transmission of competitive demand for labor to a particular firm.

On the other hand, the relationship between costs and prices is

not very close in some industries. In agriculture, it is remote. In mining of copper and the non-ferrous metals, product prices fluctuate widely over the cycle, and wage costs affect prices only when they approach marginal variable costs.

Subject to all of these qualifications, I believe that wage-push inflation exists and that its existence is made possible by the fact of labor organization which creates a non-competitive labor market, able to influence wage rates. Since the demands of labor enter into price only if they are granted by management, to stop this push it is necessary to induce labor not to make inflationary demands or to induce management not to grant them. How is this to be done?

Four policies may be examined:

- (1) Reduction of the bargaining power of unions—or in extreme cases, destruction of unions;
- (2) Destruction of “administered prices” and restoration of “competitive prices”;
- (3) Government controls of wages, prices and profits;
- (4) Restoration of the expectation of price stability and government monetary and fiscal policy devoted to achieving such stability in a free society.

The three parties to every transaction are labor, management, and the consumer. Each seeks to maximize its real income. The bargaining power of labor and management depends on their power to withhold their services, that of the consumer on his refusal to buy. Destroy the consumer’s power of resistance by agreeing that aggregate demand must be maintained regardless of asking prices, as some hold that the Employment Act of 1946 requires, and there is no force left to keep prices from rising. Monetary demand must be continually revised upward as inflation proceeds.

In a free society, moreover, the proper allocation of resources requires each party to seek his own gain, and he may be expected to do so. Labor unions in seeking a higher income for their members do not concern themselves any more than any other group with its source: whether it comes from profits or out of higher prices, though they would prefer higher money wages without a higher cost of living.

The purpose, aim, function and objective of labor unions is to exert a wage push. That is why they exist, and when they cease to do this they will cease to exist. Likewise, the purpose and function of management is to maximize profits and to resist the wage push if and when it threatens to encroach unreasonably on profits. When

management fails to do this, it is failing to perform its function. Collective bargaining brings these forces together, and the actual wage agreement comes from their resolution. The wage-push is a reality and must be expected, but whether it results in strikes and unemployment, or higher prices and inflation, depends upon the strength of the contending forces. If the employer is weak, he may be forced to sacrifice profits; if strong, he may take a strike and resist the claims. If, on the other hand, he finds that higher costs can be passed on to the consumer in higher prices, there is little direct economic incentive to battle with the union when he can concede to them and still maintain profits.

Lately some employers have contended that they are too weak to resist union demands, that they must concede to the unions or risk destruction of their businesses. They claim furthermore that they have been obliged to concede higher wage costs and then pass them on to the consumers; because of their weakness as compared to the powerful unions, higher costs and higher prices become inevitable. When, however, they find that higher costs cannot be passed on to the consumer, they even take a reduction in profits. Even some of the largest employers having great financial power have made this case for their concession to union demands. If this be true, then many big companies face a desperate future unless we continue with inflation or unless Congress takes action to weaken the economic power of labor unions. It does not seem to me, however, that industry is so weak that its management must meekly submit to its own destruction by the threat of unreasonable wage demands. The real test of the strength of labor and management will come when management cannot pass on higher costs as higher prices. If under those circumstances they are obliged to bargain away their own solvency, we will then be faced with the laborization of society and the end of private enterprise. I do not envision any such result.

Labor unions are not organized to pursue a sacrificial wage policy either in the interest of the employer's solvency nor of society as a whole. They can be expected to pursue their own interests, though, it is to be hoped, in an enlightened way and reasonable enough to weigh the strength of countervailing forces. So long as union power exists, it cannot be expected to make only such demands as satisfy the employer or the public. Unions are not the management and do not have its responsibility. Moreover, in a free society standards of reasonable wages, prices and profits cannot be determined independently of the processes of competition and bargaining. I submit

that even a job-conscious theory of the labor movement, fully implemented by pure theory, statistics and econometrics, cannot tell us what particular wages and prices ought to be. This is because in a free society price is a consequence of competition and bargaining, not a guide to what such competition and bargaining should produce. The attempt to force conformity to such a standard would soon result either in usurpation of the function of management by labor or in an authoritative determination of wages and profits which would be political and arbitrary.

Whether labor is judged too weak or too strong depends largely upon the interest group making the judgment. However, as a guide we can have recourse to the original purpose of labor organization to prevent monopsonistic exploitation of labor but not to create a device for monopolistic exploitation of the unorganized sectors of society by pushing their real income below the competitive level. Although labor unions can therefore be justified as a means of redressing the balance of power, they cannot be justified socially as a source of arbitrary power exceeding that held by others. Much of this arbitrary power derives from a favorable public sentiment which is now turning against labor, from legal rules prompted by this sentiment, and from sheer political and physical power both of which seem now to be increasing.

Some economists have contended that unionism does not affect the wage level at all, something quite different from the view we are now considering. But if unions can have no effect on real wages, it means either that monopsonistic exploitation does not and would not exist or that labor unions are powerless to offset it. This is quite different from the view that unions not only do offset it but also exert monopoly power themselves which raises their incomes above the competitive level. The truth of these contentions is beyond our present purpose. For we are here concerned not with real wages but with the effect of unionism on money wages and inflation.

Unions should be able to achieve through collective bargaining wages commensurate with their contribution to social output, measured by competitive standards. For this objective, bargaining power may be needed. The objective of wage negotiations should be to find a division of the product that will encourage all productive factors to perform their function—not to starve out one or the other. But unions are not entitled to have other rights, privileges and immunities that are denied to other citizens. If their bargaining power is economically excessive, it might be balanced by organization of employers to share

losses from strikes as the airlines have done recently. Wages and prices should express the economic facts. They should not be an expression of sheer coercive power and privileged legal status.

Institutional economics stresses that the terms of actual transactions are the consequences of not merely economic power but social, legal and political power which determines the institutions governing price and wage formation. Labor unions have a two-fold power: the economic power expressed by the strike, and the political power to change the rules of the game by political means in their own favor and against unorganized labor, the employers, and the rest of society.

The labor union as an economic agent must therefore be distinguished from the union as a political force altering the rules of the game in its own favor. Labor's power grew because the community sympathized with its aims. Labor in turn professed interest in the public good. Now that it has achieved power, some labor leaders turn their backs upon the public and follow their own narrow aims. Many years ago it was contended that labor ought to be job conscious, not class conscious. Since the American worker is not now and never was communistic, such advice had little relevance to actual situations and reflected only the conflicting ideologies of a few scattered intellectuals. There is no doubt that unionism is now completely job-conscious. As a body of citizenship, it ought also to be socially conscious. Organized labor as a member of the community ought to join in the fight against inflation and not to oppose restrictive monetary policies simply on the ground that they make it harder for leadership to get wage increases.

The public will hardly accept the view that labor organization must be destroyed or weakened because it causes inflation. Inflation has too many causes and facets. We must first establish a policy of price stability and thus induce or compel the employer to resist wage demands that he cannot meet without raising prices. If such resistance creates strikes and huge losses to the economy as a whole, then the public will have to judge who is to blame and whether any corrective measures are necessary. I do not, however, believe that these things need come to pass.

The historical objective of unions was to equalize bargaining power in a world no longer conforming to the competitive ideal. Where and when the law permits them to exercise arbitrary power unrelated to this objective, or to exert arbitrary economic force for the purpose of destroying their employer, then the law has failed in its rightful purpose and new legislation is needed. Unionism is not

an end in itself, and collective bargaining should not become collective coercion.

But to propose at this time that Congress attempt to redress the balance of power in favor of the employer presupposes that Hearings could establish what is a desirable balance of power, how it could be measured, and how the purported unbalance could be brought into a stable equilibrium by Congressional action. I have seen no proposals that would insure this result; indeed most of them would merely result in further politization of industrial relations and the substitution of a political wage for an economic wage.

I do not believe, therefore, that the remedy for inflation is to expect labor to cease to push its own interests or that it is possible to destroy or seriously weaken unionism in the interest of price stability. Second, while I endorse the view that competition is desirable, I do not believe that business can be atomized any more than labor, and I do not attribute inflationary tendencies to "administered" prices. Business can agree to higher wages, incur higher costs and seek to recover them, but it cannot create inflation if a proper monetary and fiscal policy is followed with the aim of price stability. Third, we may dismiss government controls of wages, prices and profits because in a free society there are no standards for administering such controls for the society as a whole. Fourth, I conclude that the prevention of inflation must remain, as it always has been, the objective of monetary and fiscal policy. All economic interests must be forced to live within the ambit of a stable monetary unit. Managements who cannot resist unreasonable union demands and who appeal to political leadership for help will have to give way to those who know how to bargain effectively with the means at their command. Faced with such an opposition, union leaders will be obliged to bargain for a fair wage, not an inflationary wage.

Management no less than labor does not like industrial strife. If, therefore, a national policy of price stability is imposed upon both labor and management by monetary and fiscal policy, they will be obliged to make their bargains conform to this policy.

But an anti-inflationary policy to be effective would also need a change in the now all-pervasive inflationary sentiment obsessing this nation. The economic teaching of recent years, which supports the fallacious theory of underemployment equilibrium and places responsibility for full employment upon governmental monetary and fiscal policies rather than upon the action of individuals, is a strong intellectual support for inflationary forces. From this view arises the doc-

trine that, with full employment in our imperfectly competitive world, inflation can be controlled only by a policy of maintaining a reserve army of the unemployed, and that if this is not done some inflation is necessary. In a crisis, tolerance of creeping inflation turns to its advocacy as a lesser evil. The doctrine of a reserve army of the unemployed is both immoral and intellectually unsound. For no permanent army of the unemployed can prevent wage increases unless it competes for jobs with the unionized forces already having job seniority, and this is one thing that it cannot do. Not the existence of some other unemployed workers, but the knowledge of the employer that he should not price himself out of the market, and of the existing union worker that he must produce at a cost that will move the product in order to keep his own job, is what helps to preserve price stability, creates a proper allocation of resources, and maintains aggregate demand at a proper level. But to guarantee a given level of output and employment, even if it be six million below the maximum, without regard to price, in the hope that it will itself promote price stability, is an illusion born of specious reasoning.

The belief that inflation is inevitable or even likely results in actions designed to hedge against it through the purchase of real estate, common stocks and other capital assets. Variable annuities based on equity investment and the investment of pension funds and other trust funds in common stocks are all evidence of this inflationary sentiment. Under these circumstances it is not surprising that the worker also seeks to protect himself by having his wages boosted at a faster rate than the inflation that he fears.

Only a persistent resistance to the inflationary tendencies by the monetary and fiscal authorities will give both labor and management the shock treatment which is needed to reestablish stable price expectations.² One cannot expect the workingman to be more perspicacious than the rest of society. Actually, he finds little guidance from either his leadership or the intellectuals. He is told not to be communistic or socialistic, but he is not told how to pursue his own legitimate interests within the ambit of a free society. He is admonished not to be class conscious, but he is not shown how to be socially conscious without sacrificing his own legitimate ends. For if labor is to be a political as well as economic power, it must assume its share of responsibility for the welfare of the nation as a whole and not use

²Walter A. Morton, "Development and Implications of Federal Reserve Policy," *American Economic Review*, Vol. XLVII, No. 2 (May 1957), pp. 229-243.

political power, as has been its wont, merely to reward its friends and to punish its enemies, and thus to simply assume that its own narrow economic objectives are good national policy.

Legislators must vote on many issues of national concern. For labor to judge their capacity and fitness by their vote on their pet bills alone is an idolatrous elevation of a selfish motive into a high political principle. Such a policy puts a premium upon mediocrity and subservience, tending to drive out of national life the independent representative of ability, probity and devotion to the national welfare. As an economic agent, labor unions must pursue self-interest within a reasonable institutional setting, but they, no more nor less than other groups, have a responsibility as citizens acting in their political capacity to protect the dollar against depreciation and to support legal institutions that are just and fair to all.

SOME ASPECTS OF WAGE STATISTICS AND WAGE THEORY

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I

It is not clear that wage theory, historically, has been more unsettled than many other aspects of economic analysis. The subject does present peculiar difficulties, particularly on the supply side. Much of the controversy, however, has been the product of changing social and economic conditions, including the rise of trade unionism and improvement in the real wages of the working population. In the development of modern theory, the latter factor was decisive, for it rescued wages from the grip of the Malthusian nightmare. By the end of the third quarter of the last century, the rise in real wages had been sufficiently sustained to require a basic reexamination of the factors in wage determination.¹

¹ See the remarkable study by E. H. Phelps Brown and Sheila V. Hopkins of the money and real wage rates of building craftsmen in southern England since 1260 ("Seven Centuries of Building Wages," *Economica*, August 1955, and "Seven Centuries of the Prices of Consumables, Compared with Builders' Wage-Rates," *Economica*, November 1956). The authors conclude that it was not until about 1880 that real wage rates regained the level existing at the beginning of the sixteenth century. By 1880, real rates had increased by about a third as compared with the level of the 1850's. This comparatively rapid rise in real rates of pay clearly helps to explain both the practical developments and the theoretical controversy that occurred during the third quarter of the century. For example, trade unionism as a factor in wage determination was scarcely mentioned in the first edition of Mill's *Principles of Political Economy* (1848); in his preface to the seventh edition (1871), Mill took note of recent discussion "on the influence of Strikes and Trade Unions on wages," but concluded that the results were not yet ripe for inclusion in a general treatise. Two years earlier, however, in his repudiation of the wages fund doctrine, Mill had written that "the right and wrong of the proceedings of Trade Unions becomes a common question of prudence and social duty, not one which is preemptorily decided by unbending necessities of political economy" (review of Thornton's *On Labor: Its Wrongful Claims and Rightful Duties*, reprinted in *Dissertations and Discussions*, (London: J. W. Parker, 1859). The controversy over wage determination provoked Cairnes, in what proved to be the last major statement (1874) of classical economic ideas, to devote considerable attention to trade unionism in relation to wages (J. E. Cairnes, *Some Leading Principles of Political Economy*, New York: Harper & Bros., 1874, pt. II, chs. III-IV). Taussig notes that the controversy resulted from "the pressure of practical problems" and that the Royal Commission on Trade Unions of 1867 was "both a result and a further cause of the concentration of public opinion on disputes about wages" (Frank Taussig, *Wages and Capital*, New York: D. Appleton & Co., 1899, p. 241). Most of the questions raised by the release of wage determination from the "unbending necessities of political economy" are still with us in one form or another.

The theory of wages that gradually emerged after the collapse of the wage fund doctrine revolved about the general idea, as expressed by Jevons, "that wages are the share of the produce which the laws of supply and demand enable the laborer to secure."² The specific application of marginal analysis to factor pricing came a little later, but by the turn of the century a marginal productivity theory of wages had been elaborated by economists on both sides of the Atlantic. In this country, of course, the place of major distinction is occupied by J. B. Clark.³

Although no alternative theory of wage determination has gained appreciable acceptance among economists, marginal analysis, almost from the beginning, has been under attack. The grounds of attack have been various. It has been criticized as providing an ethical defense of existing wages and other forms of income. The theory unquestionably has been utilized for this purpose, particularly in combatting socialist charges of labor exploitation.⁴ Another line of criticism has been to the effect that businessmen neither make their decisions in marginal terms nor are equipped to do so. The forceful presentation of this thesis by Lester, based largely on responses by businessmen to mail inquiries designed to elicit the bases for managerial decisions, was subjected to severe criticism by Machlup.⁵ Lester also pointed to a gap between the marginal theory of the firm and aggregative theories of income and employment. Such an hiatus undoubtedly exists; that it can be bridged is suggested by Weintraub's recent work on income distribution.⁶

II

This paper seeks particularly to discuss another line of criticism that has been directed at marginal wage theory. This criticism flows from observed conditions in the labor market, especially the extent

² W. Stanley Jevons, *Principles of Political Economy* (London: Macmillan, 2nd edition, 1879), p. xlv. The preface to this edition contains a brilliant account of the emergence of neoclassical wage theory.

³ John Bates Clark, *The Distribution of Wealth: A Theory of Wages, Interest and Profits* (New York: Macmillan, 1899).

⁴ Clark (*ibid.*, p. 4) explicitly refers to the socialist case as requiring a test to determine "whether the natural effect of competition is or is not to give to each producer the amount of wealth that he specifically brings into existence."

⁵ Richard A. Lester, "Shortcomings of Marginal Analysis for Wage-Employment Problems," *American Economic Review*, v. XXXVI (March 1946), pp. 63-82; and Fitz Machlup, "Marginal Analysis and Empirical Research," v. XXXVI (September 1946), pp. 519-554.

⁶ Sidney Weintraub, *An Approach to the Theory of Income Distribution* (Philadelphia: Chilton Co., 1958).

of occupational wage dispersion. The existence of a considerable measure of dispersion is familiar to anyone who has engaged in the painful task of compiling detailed wage statistics. It was noted as early as 1886 by the first commissioner of the Bureau of Labor Statistics.⁷ At the turn of the century, Charles Booth called attention to the variations in the wages paid to workers within the same trades in London.

“As to remuneration,” he wrote, “the most salient and remarkable fact is its variation in amount. There would seem to be no standard, and the laws by which wages are governed are difficult to trace. The variation is noticeable not only, or even particularly, between trade and trade. It is found just as much between man and man within the limits of the same trade; and applies also, though not so constantly, to different periods of the year with the same men. It affects rates of pay no less than results in income; it applies to women as well as to men, and to young as well as to old.”⁸

Large-scale occupational wage surveys during World War II and the postwar years revealed the pervasiveness of substantial wage dispersion. The results of this survey activity excited wide interest among economists. Reynolds wrote in 1946 that “it is always somewhat disturbing [in view of the assumed tendency toward wage equalization within labor markets] to observe the great variety of rates for apparently comparable jobs which prevails in actual labor markets.”⁹ Ross pointed out that “wage rates are not equalized in the local labor market. Every competent survey establishes this fact. If it had never been established prior to 1941, the comprehensive area wage studies of the Bureau of Labor Statistics during the recent war would have provided a final and conclusive demonstration.”¹⁰ Lester noted that “the wide diversity in plant wage levels in the same labor market area is strikingly indicated by the local surveys made by the U.S. Bureau of Labor Statistics in 1943 and 1944 . . .”¹¹ Wage dispersion is revealed not only by governmental wage surveys. In their description

⁷ First Annual Report of the Commissioner of Labor, *Industrial Depressions* (Washington: Government Printing Office, 1886), p. 142.

⁸ Charles Booth, *Life and Labour of the People in London*, Second Series, V (London: Macmillan, 1903), p. 203.

⁹ Lloyd G. Reynolds, “Wage Differences in Local Labor Markets,” *American Economic Review*, v. XXXVI (June 1946), p. 366.

¹⁰ Arthur M. Ross, *Trade Union Wage Policy* (Berkeley: University of California Press, 1948), pp. 46-47.

¹¹ Richard A. Lester, “Wage Diversity and its Theoretical Implications,” *Review of Economics and Statistics*, August 1946, p. 152.

and analysis of surveys undertaken by employer associations, Tolles and Raimon remark that "any embarrassment of wage surveying associations is not because of the uniformity of the wages they report but, on the contrary, because their reports show, year after year, such a pervading diversity of wages."¹²

Conventional wage theory has been vigorously attacked on the ground that occupational wage statistics do not disclose single rates, or perhaps a tendency toward single rates, for occupational categories within labor markets. Thus, Lester writes that "it is wrong to assume that, in the absence of collusive or compulsory forces, there will be a single 'prevailing wage' in a locality which is paid by a number of firms employing the same class and quality of labor. Competitive forces in the labor market apparently do not tend to enforce a single rate but result in a variety of rates."¹³ Myers and Shultz, on the basis of rather general wage statistics for manufacturing plants in a New England mill town, declare that "certainly there is nothing here approaching a single rate that 'clears the market.'"¹⁴ Essentially the same conclusion was reached by Reynolds in his study of wages and labor mobility in another New England factory town.¹⁵

III

Whatever its defects may otherwise be, the marginal productivity theory of wages is in fact compatible with the existence of a considerable measure of wage rate dispersion. The "imperfections" of the

¹² N. Arnold Tolles and Robert L. Raimon, *Sources of Wage Information: Employer Associations* (Ithaca, N. Y.: Cornell University Press, 1952), p. 240.

¹³ Lester, "Wage Diversity and its Theoretical Implications," p. 158.

¹⁴ Charles A. Myers and George P. Shultz, *The Dynamics of a Labor Market* (New York: Prentice-Hall, 1951), p. 161. The wage measures used were "minimum rates" and straight-time average hourly earnings by establishment in manufacturing. The authors point out with admirable candor that "one manufacturer may state as his 'minimum base rate' the minimum guaranteed to piece workers, another the lowest base on which a piece rate is calculated, a third the lowest hourly earnings of any employee, and a fourth his official hiring rate, even though no one is presently employed at that low level" (p. 159). Differences among establishments in the second wage measure—straight-time average hourly earnings—are affected, of course, by differences in labor force composition, method of wage payment, and other factors in addition to differences in rates for similar work.

¹⁵ Lloyd G. Reynolds, *The Structure of Labor Markets* (New York: Harper & Brothers, 1951), pp. 233ff. Reynolds used principally plant hiring rates and plant average hourly earnings as indicators of interplant wage differences. Some use was also made of the labor grade rates for those plants using the job evaluation plan of the National Metal Trades Association. See pp. 184–185; the wage schedule used by Reynolds is reproduced on p. 318.

real world were clearly recognized by the formulators of the theory. Clark's assumptions, for example, were quite rigid; he assumed a static or stationary state characterized by perfect competition and mobility of the factors. He hastened to add that "perfect mobility of the agents of production never exists; and hence prices are always varying, in greater or less degree, from the rates that the unhindered action of the competitive impulse in men would maintain."¹⁶

But aside from consideration of the dynamics of industry and of market imperfections, another factor tends strongly to make for intra-occupational wage differences. Marshall pointed out many years ago that "it is commonly said that the tendency of competition is to equalize the earnings of people engaged in the same trades or in trades of equal difficulty; but this statement requires to be interpreted carefully. For competition tends to make the earnings got by two individuals of unequal efficiency in any given time, say, a day or a year, not equal, but unequal . . ."¹⁷

Common observation and experience clearly indicate that employees in any line of work do differ considerably in their ability to contribute to production. Surely not all of those classified as "economists" are equally "productive," even with proper allowance for age, training, experience, and other factors. This is true also of medical doctors, plumbers, typists, toolmakers, and, generally, of workers in any occupational group, however narrowly defined.

It is quite difficult to obtain any clear idea of the range of individual differences in efficiency. Recently the Bureau of Labor Statistics conducted an occupational wage survey in the men's coat and suit industry.¹⁸ The nature of the work in this industry is such that an occupational survey becomes in large part a survey of particular operations. Many operations are paid on a piece-rate basis. It is thus possible to examine the dispersion of earned rates of pay for individual workers on a variety of narrowly defined operations within particular establishments. Since earnings are related directly to output, this should provide at least a rough indication of variations in efficiency for relatively routine but nonmachine-paced work.¹⁹

¹⁶ Clark, *op. cit.*, p. 78.

¹⁷ Alfred Marshall, *Principles of Economics* (London: Macmillan, 8th ed., 1920), p. 547.

¹⁸ BLS Report No. 140, *Wage Structure: Men's and Boys' Suits and Coats* (1959).

¹⁹ See Jerome A. Mark, "Measurement of Job Performance and Age," *Monthly Labor Review*, v. 79 (December 1956), pp. 1410-1414.

For the purpose of this paper, attention will be directed to one occupation (or operation), hand buttonhole making, in two of the leading centers of men's suit and coat production. These centers will be designated as 1 and 2, respectively. Moreover, information will be presented only for the two establishments in each of these centers with the largest number of workers employed as buttonhole makers. Establishment 1-A employed 83 workers in this operation; establishment 1-B, 55; establishment 2-A, 33; and establishment 2-B, 21. The number of workers in each of these establishments would appear to be sufficiently great so that variations in earned rates (output) should throw some light on the range in efficiency among individuals in this type of work.

As chart 1 indicates, the range in the earned hourly rates of buttonhole makers exceeded 100 percent in three of the four establishments. In the fourth, the difference between the lowest and the highest earned rate was about 53 percent. Relative dispersion, as measured by the ratio of the standard deviation to the mean, was 11 percent in establishment 2-B, and ranged from 18 percent (1-A) to 25 percent (2-A) in the other three establishments. These high ratios reflect the width of the wage bands and the absence of marked concentrations of workers within them.

If efficiency (as measured by earned rates) can vary to this extent in an operation such as buttonhole-making, it seems reasonable to suppose that the range of variation is even greater in less routine types of work requiring greater skill, initiative, and responsibility. The range presumably is greater among lawyers, however their productivity may be measured, than among key-punch operators in an office; or among skilled craftsmen as compared with assemblers on routine work in a manufacturing establishment.

In a competitive system, some account clearly is taken of this factor in the process of wage formation. One way is through the use of some type of wage incentive. Another is through the employment of rate ranges in time-rate payment systems. Rate range systems, indeed, are found in a distinct majority of the establishments in most of the labor markets in which the Bureau of Labor Statistics has made wage surveys.²⁰ Such systems make some allowance for length-of-service (experience) within occupations, and often for some kind of "merit review" as well. Even in establishments which, as a matter

²⁰ Otto Hollberg, "Extent of Wage Formalization in 40 Labor Markets," *Monthly Labor Review*, v. 76 (January 1953), pp. 22-26.

of *policy*, have single job-rate structures, it is not unusual to discover wage-rate differences within occupations. Such "personal" rates appear to reflect a powerful tendency for differential compensation to emerge.

In single job-rate structures, the problem of employee selection is crucial. In machine-paced operations, for example, the workers selected must be capable of adapting themselves to the operating rates established by management or through collective bargaining. In automobile manufacture, very large numbers of employees are engaged in highly repetitive assembly work or in comparatively routine and largely automatic machine operation and inspection tasks. Single job rates are characteristic of the industry, except among the skilled trades.²¹ The selection and retention of new employees is a management function. At General Motors, for example, the collective bargaining agreement provides that the company has "no responsibility for the reemployment of temporary employees if they are laid off or discharged . . ." ²² The Company thus has freedom to select only those employees who can meet the production standards for the jobs for which single rates are set.

Through the operation of the wage and employment mechanism, a constant process occurs within establishments by which wages in some measure are adjusted to the productive capacity of employees in particular types of work or, alternatively, workers are selected with reference to expected performance at given wage rates. These adjustments, at best, are approximate. They are not mutually exclusive. In the initial selection of buttonhole makers, for example, some attention may be given to expected job performance.

With respect to the dispersion of occupational wage rates within labor markets, one factor clearly is rate differentiation among individual workers within establishments. These differences are perhaps greater than has often been assumed in the recent literature on wage theory in relation to observed conditions in the labor market.

IV

In the postwar discussions of occupational wage dispersion within labor markets, little notice has been taken of intra-establishment dif-

²¹ H. M. Douty, "Wages in the Motor Vehicle Industry, 1957," *Monthly Labor Review* v. 80 (November 1957), pp. 1321-1329.

²² Agreement between General Motors Corporation and the UAW, June 12, 1955, par. 56. After 30 days of employment, the case of a temporary employee may be taken up as a grievance if he claims that his layoff or discharge was not for cause.

ferences. This has been due, certainly in large part, to the fact that wage data for individual establishments are rarely available from either governmental or private surveys. There are several reasons for this lack of availability. The routine publication of occupational wage distributions for individual establishments would be inordinately expensive; moreover, wage information in such detail is difficult to handle for most practical purposes. Since wage data for individual establishments are typically confidential, there would also be danger of disclosure (through employment counts or in other ways) in many cases.

The absence of individual establishment data has contributed to a tendency to attribute occupational wage dispersion largely, if not entirely, to differences in wage level among establishments. For this purpose, average hourly earnings by plant have sometimes been treated as single rates.²³ There has been considerable discussion of "high- and low-wage" firms, with at least an implicit assumption that sharp dichotomies typically exist in wages among firms.²⁴

Substantial differences often are found in the *level* of occupational wages among firms in the same labor market. But this does not necessarily mean that these establishment wage levels can be viewed as distinct from one another, in the sense of each establishment level being represented by a single rate or a number of rates not found in other establishments. Such typically is not the case. The reason is found in the nature of occupational rate dispersion within establishments.

In a recent survey in the Chicago labor market,²⁵ three or more key-punch operators (women) were found in 69 of the manufacturing establishments²⁶ included in the survey. This is a comparatively routine white-collar job paid on a time basis. Single salary rates were found in only three of the 69 establishments; in all other establishments the employees were paid a range of rates.

Chart 2 attempts to reduce the mass of individual establishment

²³ Richard A. Lester, "A Range Theory of Wage Differentials," *Industrial and Labor Relations Review*, v. 5 (July 1952).

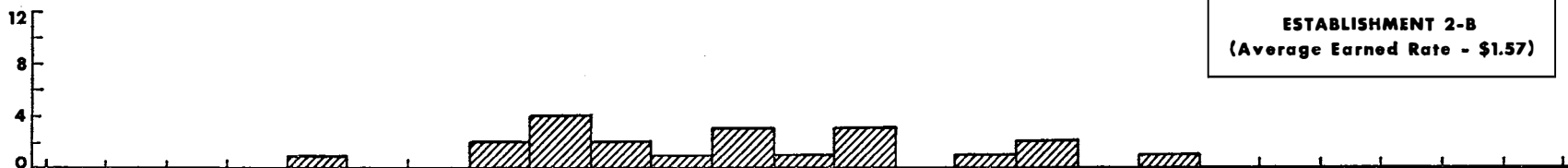
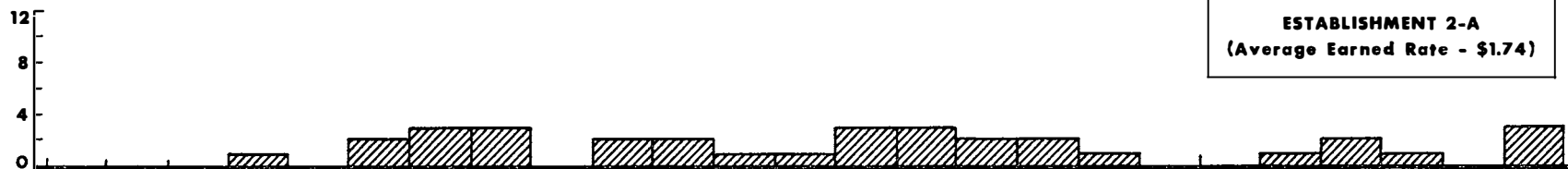
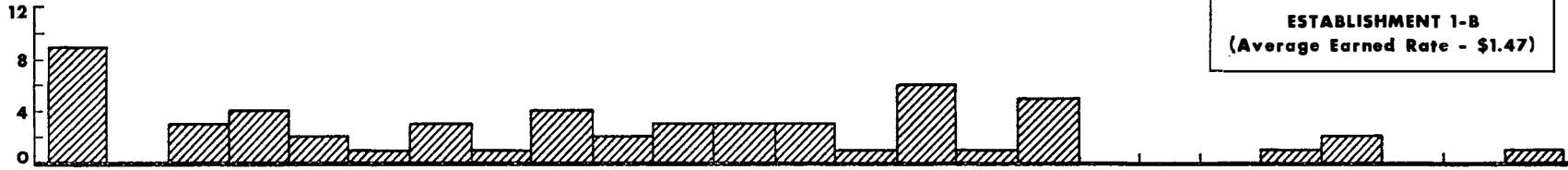
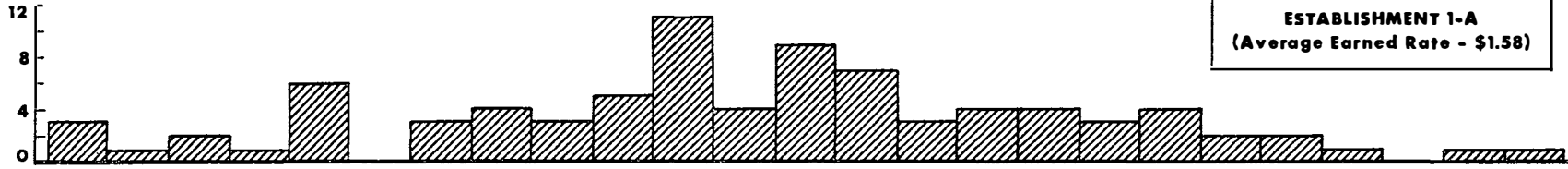
²⁴ Thus, Lester ("Wage Diversity and its Theoretical Implications," p. 152) writes that "instead of a single rate [in the labor market], there is usually a band or zone of rates ranging from the lowest- to the highest-paying employer in the community." See also Reynolds, *The Structure of Labor Markets*, pp. 233 ff.

²⁵ BLS Bulletin 1224-14, *Occupational Wage Survey: Chicago, Illinois*, April 1958.

²⁶ The inclusion of data for nonmanufacturing establishments would not change the subsequent analysis in any essential.

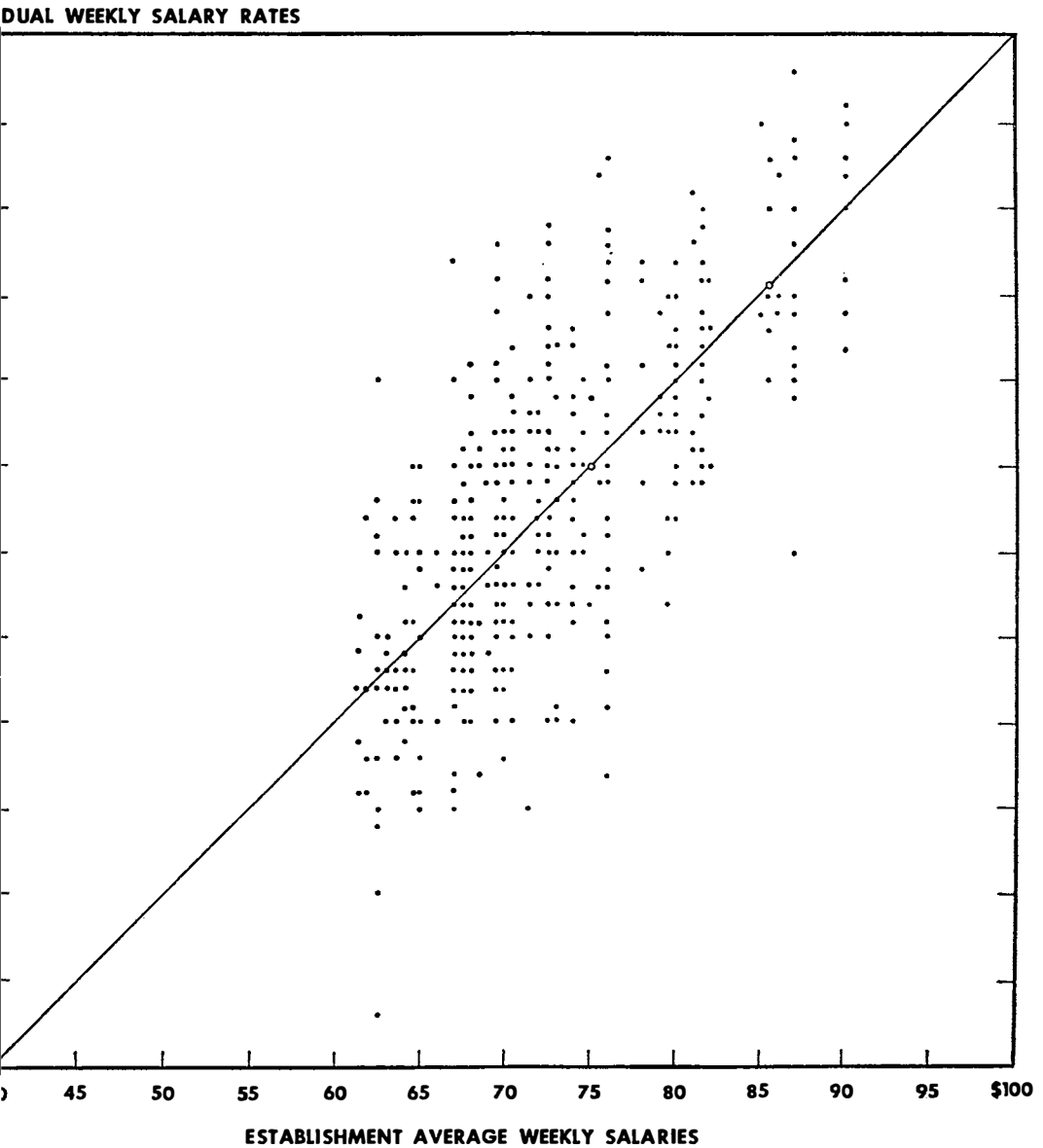
**Chart 1. HAND BUTTONHOLE MAKERS: DISTRIBUTION OF WORKERS
By Straight-time Hourly Earnings, Four Establishments,
Men's and Boys' Suits and Coats Industry, March 1958**

Number of Workers



\$1.00-1.05-1.10-1.15-1.20-1.25-1.30-1.35-1.40-1.45-1.50-1.55-1.60-1.65-1.70-1.75-1.80-1.85-1.90-1.95-2.00-2.05-2.10-2.15-2.20 and

**Chart 2. KEY-PUNCH OPERATORS:
 DISTRIBUTION OF AVERAGE WEEKLY SALARIES
 AND INDIVIDUAL SALARY RATES
 69 Manufacturing Establishments
 Chicago, Illinois, April 1958**



Note: Two or more establishments with identical average salaries
 were considered as one establishment.
 Rates for single-salary establishments indicated by o.

salary data for key-punch operators to useful form. It shows the average salary for this job in each of the 69 manufacturing offices,²⁷ together with the rates within each establishment at which one or more employees were found. This provides a visual picture of the structure of rates for this job.

It will be observed that among this group of establishments the level of salaries for key-punch operators ranged from \$61.50 to \$90.00 a week, a difference of \$28.50 or about 46 percent. The interquartile range in establishment averages was \$11.50. But the striking aspect of these data, as the chart indicates, is the extent to which the salaries of key-punch operators overlapped among establishments. For example, the salary rates in the establishment with the lowest wage level (\$61.50) fell in the range, \$55 to \$70. More than 70 percent of the remaining 68 establishments employed one or more key-punch operators at rates within this same range. To the extent that this situation exists, the sharp distinctions characteristic in labor market analysis between "low-wage" and "high-wage" plants would appear to require qualification. For the most part, the wage structures represented in chart 2 are not separate and distinct.

In addition to key-punch operators, the salaries paid by individual establishments in Chicago to employees in two other relatively routine types of clerical work were also examined.²⁸ The results were very similar to those already described. It may be objected that these are white-collar occupations in predominantly nonunion offices.²⁹ Accordingly, it will be useful to consider wage rate dispersion for plant jobs in Chicago. The data for maintenance electricians in manufacturing establishments will be used for illustrative purposes.³⁰

The 1958 Chicago community wage survey included 65 manufacturing establishments that employed three or more maintenance electricians. This is a skilled job. To be included within the survey job classification, a worker had to have a formal apprenticeship or equivalent training and experience. Duties involve a complex of

²⁷ Two or more establishments with the same average rate are represented as one establishment; thus, 5 establishments each had an average rate of \$67.50 for this job.

²⁸ Typists, class B, and comptometer operators.

²⁹ Only 5 of the 69 offices used in the analysis of key-punch operator salaries were unionized.

³⁰ The data for two other plant jobs (laborers, material handling, and male janitors, porters, and cleaners) were also examined in detail.

tasks, which may differ somewhat for the individual worker, depending on the size and character of the manufacturing establishment. Time rates are typically paid.³¹ Most of the establishments are unionized,³² including the plants with both the lowest and the highest level of rates for this occupation.

As chart 3 shows, there was dispersion of rates for maintenance electricians within most (about two-thirds) of the establishments. As in the case of key-punch operators, there was considerable overlapping in wage structure among plants with different *levels* of earnings for the occupation. Although the wage structures for these two quite dissimilar occupations have the same general contour, at least one significant difference should be noted. Single-rate establishments were relatively much more numerous for electricians than for key-punch operators.³³ This difference affects the nature of the wage rate dispersion in the two occupational groups.

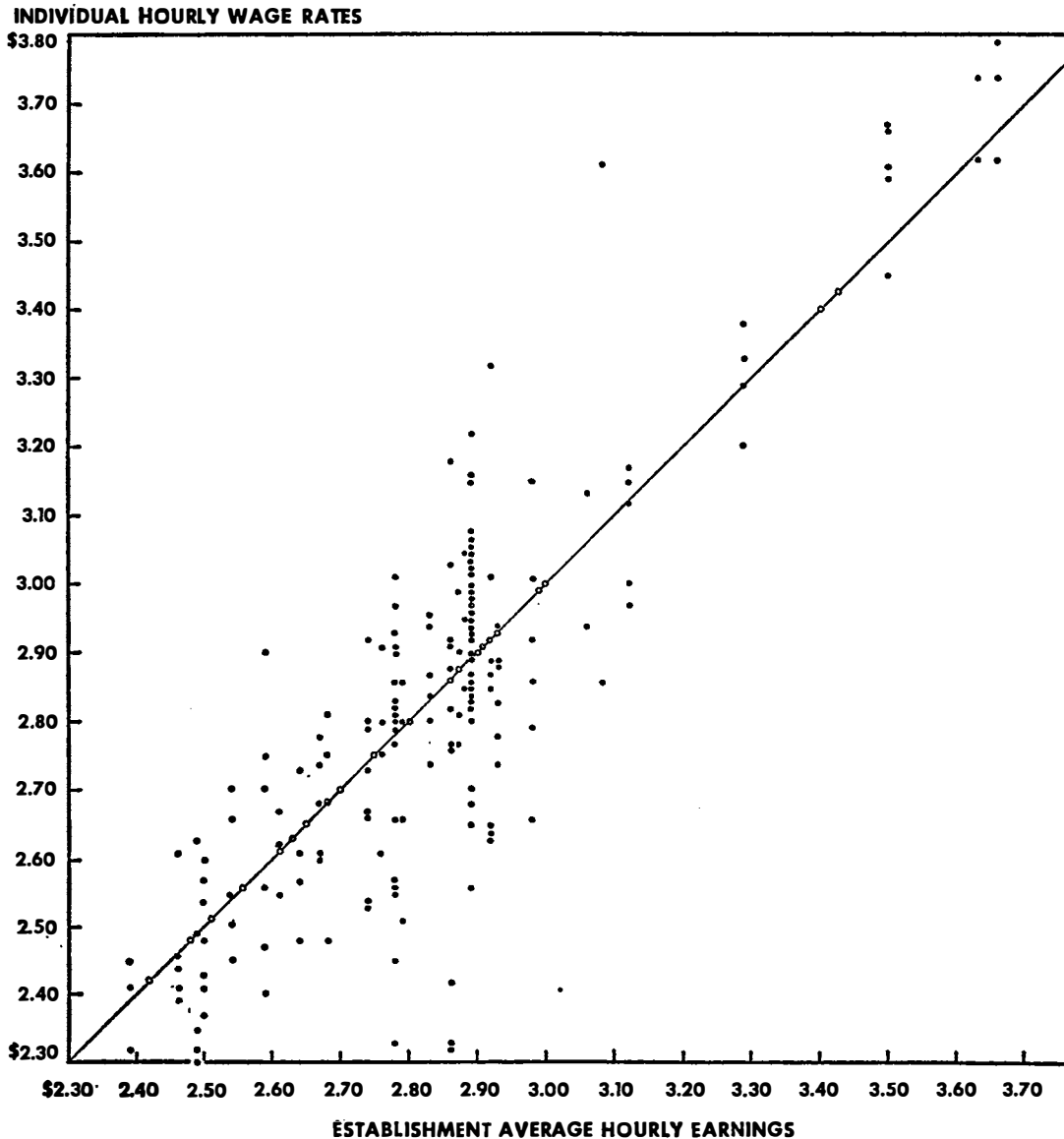
Clearly it is not the case that rate dispersion for a group of workers reflects only rate differences among establishments. Rate differences within establishments can contribute to the total dispersion. The effect of intra-establishment dispersion of wage rates can be measured by the variance of the individual rates within each establishment; that is, by computing the sum of the squares of the individual rate deviations from the establishment means. Similarly, the dispersion of establishment averages can be measured by the sums of the weighted squares of the deviations of the plant means from the overall average rate, using number of workers in the occupation in each establishment as weights. These two sums are additive, and the result is identical with the total variance of the distribution. The square roots of these quantities (standard deviations) provide measures of dispersion that permit comparison of the sources of variability. Coefficients of variation can be computed to provide measures of relative dispersion.

³¹ Maintenance electricians were compensated, at least in part, on some form of incentive basis in 6 of the 65 plants.

³² Plant workers in only 9 of the 65 establishments were unorganized.

³³ The data used were rates actually paid. Hence, some establishments with some form of rate range policy may have had all members of an occupation at a single rate at the time of the survey. This would be more likely to have happened in the case of maintenance electricians, whose turnover rate is presumably lower than that of key-punch operators.

**Chart 3. MAINTENANCE ELECTRICIANS:
DISTRIBUTION OF AVERAGE HOURLY WAGE RATES
AND INDIVIDUAL WAGE RATES
65 Manufacturing Establishments
Chicago, Illinois, April 1958**



Note: Two or more establishments with identical average earning were considered as one establishment.
Rates for single-rate establishments indicated by ○

The results of these calculations for key-punch operators and maintenance electricians are shown in the tabulation below.

Occupation	Mean	Standard deviation			Standard deviation as percentage of mean		
		Total	Among est.	Within est.	Total	Among est.	Within est.
<i>Key-punch operators</i>							
Per week.....	\$ 73.33	\$8.90	\$6.80	\$5.80	12.1	9.3	7.9
<i>Maintenance electricians</i>							
Per hour.....	2.88	.205	.201	.041	7.1	7.0	1.4
Per 40-hour week.....	115.20	8.20	8.04	1.64			

Despite the lower wage level for key-punch operators, it will be observed that the absolute dispersion of rates in this occupation was greater than for maintenance electricians. Relative dispersion was very significantly less for the latter occupation. There is another difference of great interest. In the case of key-punch operators, about two-fifths of the total dispersion can be accounted for by rate differences within rather than among establishments. In the case of maintenance electricians, however, only about one-twentieth of the total dispersion can be attributed to intra-establishment rate differences.⁸⁴

V

The statistical base on which this paper rests is quite narrow. It needs to be extended to a broader range of occupations in a variety of major industry divisions and labor markets. Even in its present limited form, however, it may provide insight into aspects of wage formation that are sometimes neglected. It also raises some questions.

The view that the existence of occupational wage dispersion in some sense disproves competitive wage theory is simply wrong. Even if all the imperfections in both labor and product markets could be removed, and even on the assumption of a stationary economy, occupational wage dispersion, as reflected in wage statistics, would continue to exist. Dispersion undoubtedly would be smaller in such

⁸⁴ The calculations are based on the squares of the standard deviations, rather than on the standard deviations themselves. It is the former which are additive. Thus, in the data for key-punch operators: $(8.90)^2 = (6.80)^2 + (5.80)^2$.

an economy than in an imperfectly competitive and dynamic society, but it would not disappear.

The common textbook assumption of homogeneity for a particular class of labor obscures the fact that employees in any occupational group do differ in their ability to contribute to output.³⁵ As suggested by the data for buttonhole makers, this difference may be substantial. Dispersion based on efficiency clearly would not be at variance with employer effort to equate, however crudely, marginal cost with marginal revenue. This effort may take the form of rate dispersion within plants; it may, to some extent, account for differences in wage levels among firms. The latter effect would be found to the extent that employer wage policies vary in terms of the quality of workers they seek to attract and retain. In their most illuminating study of wage determination for office employees in banking and insurance firms in Boston, Shultz and his associates point out that "the employers seemed uniformly convinced that, given a band of conceivable hiring rates where the top was about 110 percent of the bottom, the quality of girls you could hire for the top rate would clearly be superior."³⁶ With this as an operating assumption, employers pursued a variety of strategies with respect to the quality of new employees they sought to hire.³⁷

The limited data presented in this paper on the structure of wage rates within establishments for particular occupations indicate that there is less uniqueness among establishment wage levels than is often assumed. There is often substantial overlap in rates for an occupation among establishments with distinctly different average rate levels. Hence, interrelationship among establishment wage structures is greater than would appear to be the case on the basis of differences in average rates. The dispersion in occupational wage distributions is a function not only of differences in establishment wage levels, but also of rate differences within establishments. The

³⁵ Probably the best analysis of the significance of individual differences remains that of J. R. Hicks, *The Theory of Wages* (London: Macmillan Co., 1932), chap. 2. See also K. W. Rothschild, *The Theory of Wages* (Oxford: Basil Blackwell, 1954), pp. 31-34.

³⁶ George P. Shultz, Irwin L. Herrnstadt, and Elbridge S. Puckett, "Wage Determination in a Non-Union Labor Market," *Proceedings, Industrial Relations Research Association*, 1957, p. 204.

³⁷ Much of the postwar research on wage determination has related to the questions of union policy and influence. A well balanced discussion may be found in Lloyd G. Reynolds and Cynthia H. Taft, *The Evolution of Wage Structure* (New Haven: Yale University Press, 1956), pp. 167-195. Especially relevant to the present paper are the sections on personal and interplant differentials.

contribution of intra- and inter-establishment differences to the total dispersion of a distribution may well vary substantially by class of occupation and no doubt by other factors as well. Much work needs to be done in this area.

Admittedly, wage determination in the real world is immensely complicated. But excessive preoccupation with the endless detail of labor market and industry wage structures may obscure the limits that attach to wages at any point of time. For the overwhelming proportion of the wage and salaried work force, these limits are comparatively narrow, judging by such general wage distribution studies as we possess.³⁸ Within these limits (currently from approximately \$1.00 to \$3.00 an hour, with tails in either direction) are largely accommodated the extensive range of jobs, skills, and efficiencies found among nonsupervisory personnel in the whole complex of American industry. This is the more remarkable when it is considered that the industries that make up this complex differ greatly among themselves and internally in terms of size, location, organizational structure, market position, unionization, and other characteristics.

These limits, and the distribution of labor among employments that they reflect, point to the existence of powerful underlying forces affecting the structure of wages. Marginal theory, under various assumptions as to the market position of firms, and with due regard to the preference systems of workers,³⁹ would appear to throw light on the operation of market forces. In the words of Douglas, "the power of its analysis" should not be overlooked.⁴⁰ In particular, it should not be criticized for tendencies that can be explained within the confines of the theory.

³⁸ BLS Bulletin 1179, *Factory Workers' Earnings: Distributions by Straight-Time Hourly Earnings, April 1954* (Washington: Superintendent of Documents, 1955); BLS Bulletin 1220, *Employee Earnings in Retail Trade in October 1956* (Washington: Superintendent of Documents, 1957). Studies of 1958 wage distributions for factory workers and, for the first time, for nonsupervisory employees in wholesale trade should be available by mid-1959.

³⁹ See the excellent article by Simon Rottenberg, "On Choice in Labor Markets," *Industrial and Labor Relations Review*, v. 9 (January 1956), pp. 183-199.

⁴⁰ Paul H. Douglas, *The Theory of Wages* (New York: Macmillan Co., 1934), p. 67.

DISCUSSION

MILTON FRIEDMAN

University of Chicago

Unaccustomed as I am to defending trade-unions, I am moved to do so by Professor Morton's stimulating paper.

There is no difference between Professor Morton and myself—or for that matter between either of us and Professor Hildebrand—about theoretical issues. We all reject the naive wage-price spiral argument, in which autonomous rises in particular wage rates are said to produce rises in particular prices and “hence” inflation without anything being said about other areas of the economy or about monetary and fiscal policy and the supply of money. We all agree that if under such circumstances the supply of money is not increased, the result will be not an inflationary spiral, but rather unemployment, reduced output, and higher prices in the industries or plants or establishments in which the wage push occurs; downward pressure on wages and prices and upward pressure on output and employment in the rest of the economy; and a higher level of general unemployment than would otherwise prevail, the amount depending mainly on the mobility of labor and the rigidity of wages.

We all recognize that a more sophisticated theory can be formulated that is acceptable. This more sophisticated version requires that the monetary authorities or monetary and fiscal authorities be committed to “full-employment” and proceed to take expansionary measures, including expanding the money supply at more than the rate consistent with stable prices, whenever and however unemployment rises above some minimum level. Under such circumstances, it is certainly logically possible for an autonomous wage push which would produce unemployment if the money supply were not changed in response to it to be converted into an inflationary spiral by the expansionary monetary policy it generates.

Neither is there any difference between Professor Morton and myself—or so far as I can gather between either of us and Professor Hildebrand—about the question of fact up to say 1955 or 1956. We are all agreed that the general price rises from World War II up to that date cannot properly be ascribed to the sophisticated wage-price spiral. The immediate post-war price rises were either a recording of previously suppressed price rises or a result of accumulated excess liquidity plus a bond-support program; the 1950-51 price rise was a reflection of excess demand generated by the Korean War in a mone-

tary structure rendered entirely passive by the bond-support policy. From 1952 to 1955, prices were highly stable. We had the economist's dream—stable prices and a high and relatively stable level of employment, punctuated only by the mild 1953–54 recession.

The difference between Professor Morton and myself is limited to the brief period 1955–58. Professor Morton asserts that during those years we had inflation and that it was of a cost-push variety. I am dubious that the price movement during that period can meaningfully be regarded as an “inflation” and I am even less persuaded that it was the result of a wage push.

One striking feature of Professor Morton's paper is that he presents no evidence for his conclusion. On the contrary, the main content of his paper consists of a persuasive and penetrating analysis of the reasons why evidence that might superficially appear to imply a wage-price spiral cannot validly be so interpreted but is capable of being entirely consistent with a rise of prices in response to “excess demand.”

Professor Morton's conclusion that a wage-price spiral has been or is in progress is simply asserted as a matter of faith, and this is so each of the several times that the assertion is repeated. The conclusion comes perilously close to being treated as if it necessarily followed from (a) the existence of strong unions, (b) the existence of widespread acceptance of governmental responsibility for the maintenance of full employment. Of course, as Professor Morton would be the first to insist, the conclusion does not follow from either the one or the other. The existence of a strong union in one area simply means that wage rates in that area will be *higher* relative to wage rates elsewhere, and employment in that area *lower* relative to employment elsewhere than wages and employment would have been in the absence of a union. It does not mean that there will be pressure for these differentials to *widen*. Yet it is the latter that is required to produce the sequence embodied in the sophisticated wage-price spiral argument. *Increasingly strong* unions not simply strong unions are a necessary (though not sufficient) condition for setting the wage-price spiral in motion. The failure to recognize this distinction is an example of one of the most prevalent fallacies in theorizing about economic events, a fallacy that arises in many other contexts in which “high” is confused with “rising” and “low” with “falling.” A “high” price will generally have a very different effect than a “rising” price.

Professor Morton is in effect arguing that with respect to price changes, all of United States history is divided into two parts, 1776–

1955, and 1955—.....; the first part being one in which changing strength of unions had no substantial effects on movements in the general price level; the second, one in which the growing strength of unions was the major factor in producing a price rise. Now it may be that Professor Morton is right. Changes in circumstances do occur. But surely before we accept such a drastic conclusion, some reasonably persuasive evidence that there has been a basic change in circumstances is required. I find none in Professor Morton's paper, or, for that matter, in other presentations of the same view.

Consider first the price changes in 1955–58. Are these in any meaningful sense to be described as an "inflation"? Clearly, we can define "inflation" to mean any rise in a particular price index, say the index of consumer prices, in which case the answer is yes. However, it seems to me we have something more in mind when we use the term "inflation," that we implicitly mean a price rise that is atypical in either size or duration, and that we want to distinguish price rises of the kind that typically occur in cyclical expansions from price rises we term "inflationary." In this sense, the price rise in 1955–57 was less in magnitude than the average price rise during peace-time cyclical expansions of the past, and can be interpreted as a normal concomitant of cyclical expansion. If there is anything at all unusual about the episode, it is not the price rise in 1955–57 but the failure of prices to fall from 1957–58. But this too is by no means unprecedented, particularly for contractions so brief as this one turned out to be. I am myself of the opinion that we are highly likely to have substantial rises in the general price level in the next decade or so—for reasons that will be stated shortly—and it may be that in retrospect, 1955–58 will be seen to be the initial phase of the development. But this must as yet depend on evidence other than the actual movement of prices in 1955–58.

What now of the source of the price increase, mild though it was? I am myself inclined to believe that Professor Morton's conclusion reflects a confusion of two processes that have many elements in common and that alike derive from a governmental commitment to "full-employment." The one process is the sophisticated wage-price spiral, which I do not believe to have been operative over this period. The other is a pattern of over-reaction by monetary and fiscal authorities to a mild recession, which I do believe to have been operative.

In the present political atmosphere, lapses from full employment arouse far more public opposition than price rises, and it is widely accepted that government can produce full employment and has a re-

sponsibility to do so. Given such an atmosphere, any faltering in the pace of economic activity produces an almost irresistible demand for vigorous counter-cyclical measures. Some such measures—of monetary expansion, increase in governmental expenditure programs, reduction in taxes, favoring of particular sectors such as housing, and the like—are bound to be taken. If these measures had their effects instantaneously and could be shut off like water from a tap, all would be well. Once a contraction was over, they would be so shut off.

In fact, such measures inevitably operate with a lag, in some cases a long lag, and often cannot even be shut off without a long lag. In consequence, there is a strong tendency to over-react. Measures are taken to counter a recession that would have come to an end fairly shortly and would have been followed by an expansion even in the absence of these measures, or sometimes, as in 1958, measures are not even begun until after the contraction is in fact already over. The result is an inflationary hangover and upward pressure on prices long after the contraction is finished. Of course, this in turn may produce an over-reaction in a deflationary direction. But I think it will be generally accepted that present political attitudes introduce an asymmetry—expansionary measures are likely to be overdone to a much greater extent than contractionary measures. The result is likely to be a generally rising price level, occurring intermittently as a reaction to the recessions that punctuate the period.

This process seems to me to offer a much more satisfactory interpretation of our recent experience, in terms that involve no sharp break with our interpretation of the causal economic nexus in earlier episodes, than does a wage-price spiral interpretation, however sophisticated.

In an essay published in 1951, and to which Professor Hildebrand referred, I outlined this process and then went on to say about the United States, "at least for the near future, . . . the difficulty is not so much that strong unions will produce inflation as that inflation will produce strong unions. Inflation . . . will mean rising money-wage rates throughout the economy. Wherever unions exist or are created, the rises in wage rates . . . will take place through the medium of the unions, and the unions will receive credit for the wage rises. This will tend to strengthen the hold of the unions on the workers and greatly to increase their political power. . . ."

"If the process just sketched should occur it would tend to change the balance of forces and perhaps ultimately to justify the fear that strong unions will produce inflation. For as the inflation proceeded,

the rigidity effects of unions would tend to become weaker relative to their upward-pressing effects.”¹

This comment still seems to me sound, both for then and for now. Though the generally expansionary atmosphere since it was written has tended to have the predicted effect of strengthening unions, and, in particular, of reducing union-introduced rigidities through the spread of escalator clauses, we have, fortunately, not yet reached the point at which the balance of forces has been changed sufficiently to justify Professor Morton's fears or to validate his assertion of fact.

DAVID MCCORD WRIGHT

McGill University

Seven years ago, in editing my *Impact of the Labor Union*, I included the following jingle, the joint product of Professors Samuelson and Boulding:

We all, or nearly all, consent
If wages rise by ten per cent
It puts a choice before the nation
Of unemployment or inflation.

This, it seems to me, is the modern wage-price-employment problem in a nut shell, and a great part of the wage-push demand-pull argument seems to me decidedly of the nature of the hen or egg problem. One must break a vicious circle somewhere.

While it may be true that the percentage share of "labor" in total output has not shifted greatly, Professor Hildebrand nevertheless points out that (1) for the last seven years or so the average trend of money wages has been considerably in excess of productivity gains; (2) the existence of unemployment does not seem to affect the wage push in national bargaining; (3) profits as a percentage of wages have been declining; (4) adverse effects upon profit expectations (the marginal efficiency of capital) and through them upon employment can be considerable. Add to these facts the persistence of considerable feather-bedding and the revelations of corruption and intimidation disclosed by various senatorial committees, and one spells out a condition which, it seems to me, calls for some action.

¹"Some Comments on the Significance of Labor Unions for Economic Policy," in David McCord Wright (ed.), *The Impact of the Union*, New York: (Harcourt, Brace, 1951), pp. 230-31.

But Professor Hildebrand suggests only increasing "the inducement to invest, by keeping effective demand closer to overall capacity and by greater use of tax incentives" (reductions?). In all sincerity I cannot help feeling that this is a receipt for substituting *leaping* inflation in place of creeping inflation. I know that there is a school now who feel that "growth" will solve all our problems. So it would. But first catch your hare. Growth of what—the money supply or real output? If a repressive force (the unions) has already shown itself too strong to be deterred by unemployment, will removing the fiscal restraint make it any *less* repressive? The basic problem lies in the policies of many unions which restrict increases in real income. We cannot bypass this merely by more money.

What we are confronted with, I suggest, is not just an economic problem but a fundamental test of the political sophistication of the North American peoples. Will we be able to recognize and curb a dangerously one-sided degree of power when it comes from a nominally "popular" source or when it comes from a nominally "privileged" source?

Without, by any means, agreeing with everything that has been done in their names, I cannot help feeling that the adoption of the antitrust laws marked a decisive point in the development of North American culture. In them, despite all the plausible arguments that could and can be made, we turned our backs once and for all upon industrial feudalism—from the employer side. But now the same pressures toward industrial feudal stagnation recur nominally from the "employee" side. Will we be suckers this time?

The word "antitrust" encounters a sonic barrier which is unnecessary. Furthermore labor relations *are* different, requiring institutions tailored to their needs. Yet I cannot help feeling that unions have now become "over dogs," that many of them are too strong, and that the imperative question is how to reduce their *relative* strength—how to decrease their *relative* power without increasing simultaneously the power of the state?

In good faith I cannot follow Professor Hildebrand's reasoning for rejecting "dissolution of market-wide unionism." I grant that inter-union competition might thereby be increased, but I do not think it follows from this, necessarily, that the *wage push* would be increased. For by his own reasoning, it seems to me, the measure would give a much greater influence to the effects of unemployment, and would also bring about greater flexibility generally.

It is objected however that such approaches would be "dis-

ruptive" of labor relations. Here we encounter indeed a fundamental issue. In many different connections, in many different fields, and at many different times I have found myself obliged to call attention to what I have named the "administrative fallacy." The administrative fallacy is that if things are working *smoothly* they are working well. But this is far from true. A firm, an industry, a country may work smoothly—down hill. "Good" labor relations, it is vital to recognize, are not always the same thing as "good" performance by the economic system. Freedom, growth, and invention are alike, the record shows, cantankerous, untidy things. Spontaneity produces differences, and differences entail some conflict. But there is always the danger that in imposing too much order and "efficiency" we lose the spontaneity too.

"But," you will say, "why bother to raise points like this today?" "You know 'history' is against you." "Why," more concretely, "waste time on such points after the great demonstration of union power in the last U. S. election?" I do not however feel that the last election is conclusive. In the last election and at the last minute the fundamental issue of union power was raised without preparation and almost for the first time in a generation or more. Naturally at the first test the vested interest, in this case the union, won. When was it ever otherwise? When did the vanguard of a new movement ever have an easy time? But ideas do not die, and the American revolution did not stop at Valley Forge.

Please do not think me personally naive. I know that I would do "better" in my personal career if I pulled my punches and talked out of both sides of my mouth on this issue. Plenty of management would be with me on such a deal. But believing as I do that continued diffusion of power is an indispensable necessity for long-run economic growth, believing, what is still more important, that it is an indispensable necessity for the long run survival of political freedom, I feel a continuing obligation to keep the problem before the public.

MARK W. LEISERSON

Yale University

My assignment is to discuss Mr. Douty's paper, and my remarks will generally be confined to the issues raised by his excellent study. However, the phenomena Mr. Douty is observing and analyzing are

(or at least ought to be), I think, essential ingredients of any discussion of the aggregative problems of inflation which are the concern of the other two papers.

The distinguishing feature of Mr. Douty's paper is its focus on occupational wage dispersion and the empirical evidence he presents linking such dispersion to events within individual establishments. One can only applaud the developing interest on the part of the Bureau of Labor Statistics in wage distributions as well as market and industry-wide averages. But it is not the least of Mr. Douty's contributions that his pioneering efforts in this relatively neglected terrain highlight sharply some of the challenging problems facing labor economists today.

First of all, although Mr. Douty's defense of competitive wage theory is gratifying to someone like myself who finds the concepts of competitive and marginalist theory useful in the analysis of behavior in the labor market, the fact is that theory is not really of any great help in explaining either the character of the wage distributions observed or the processes producing them. I do not find the Marshallian notion of variations in "efficiency" as satisfying as Mr. Douty does. My uneasiness on this score stems primarily from the fact that in the Marshallian system the concept of "efficiency" served as a catch-all designed to account for variations in labor supply which could not be explained in terms of an individualistic utilitarian theory of workers' choice. The derivation of a reasonably well-defined labor supply curve required that worker "efficiency" be determined by factors relatively independent of worker preferences and decisions. This was accomplished in the Marshallian system by individualistic assumptions which made it irrational for a worker in a competitive economy to decide deliberately to perform at less than peak "efficiency." Thus Marshall found it possible to connect variations in "efficiency" with biological, genetic, climatic, and racial factors which could be treated as exogenous variables.

It should not be necessary to stress that the extensive studies of worker behavior of the past 20 or 30 years have produced abundant evidence that, even in the absence of unions, the observed behavior and efficiency of workers cannot be satisfactorily explained in terms of such individualistic assumptions. The interdependence of preferences—the importance of social and group attitudes—is even more marked in the labor market than it is in consumers markets. More satisfactory theories of wage differences and distributions will therefore require explicit treatment by labor economists of group behavior

or collective behavior on the part of workers and (I might add) on a much broader basis than the investigation of formally organized union activity and policies.

A second deficiency, if not defect, in current wage theory which is revealed by wage dispersion of the extent and character indicated by Mr. Douty's paper concerns the related problem of uncertainty and random influences. The emphasis of competitive wage theory on single rates and averages, which Mr. Douty notes, betrays its origins in an age of mechanical systems of scientific explanations. Here again it seems to me that progress will depend upon development of theoretical models which are broadened to take explicitly into account problems of worker behavior in the face of uncertainty and do not hide them in such negatively defined categories as "imperfections" and "frictions." Indeed, broadening of our perspectives to include the social interdependence of workers' decisions will perforce involve such consideration inasmuch as group or organized action by workers—formal or informal—may in considerable measure be rationalized as the means of dealing with an extremely uncertain environment. Similarly, it seems to me development of models generating wage distributions as the result of stochastic processes could make substantial contribution to our understanding of wage determination processes.

Finally, I would like to emphasize the significance of micro-economic investigations of wage behavior, like the one Mr. Douty carried out, for discussions of such macro-economic problems as wage-price stability and full employment. Unfortunately, there is often a tendency in discussions of these issues to ignore the limitations of analyses couched in aggregative terms, particularly with reference to the determination of the general level of wages. Of course, in the absence of a fully integrated general theory, the simplifications of aggregative theory are necessary and desirable if we are to achieve any analytic understanding of the behavior of the economy despite our ignorance of all the underlying processes. But failure to take into account micro-economic relationships underlying aggregative functions or to interpret as a structural "reality" the relative autonomy ascribed to hypothesized aggregative relationships increases the likelihood of perceiving false dilemmas, on the one hand, or exaggerating the effectiveness of control measures, on the other.

To cite a single illustration, the view that excessive union wage demands are a major "cause" of inflation carries the implication that limitations of union power or restraint on the part of unions in the

exercise of that power will eliminate the upward movement of the general wage level in the absence of excess aggregate demand. The phenomenon of "wage drift"—the persistent and significant discrepancy between contractual wage increases and actual increases in average earnings—which has accompanied the trade union policy of wage restraint in the Scandinavian countries is concrete evidence that there are influences on actual wage levels lying outside the purview of negotiated settlements which are neither negligible nor random in character. Since wage drifting generally represents the aggregate effect on average wage levels of distributional shifts not contemplated in setting the wage rate structure, there is little question that these influences are also closely connected with the type of wage dispersion which Mr. Dooty is investigating. His demonstration that a substantial part of the total wage dispersion within an occupation is accounted for by dispersion within individual establishments lends further support to the proposition that theories of general wage levels formulated without explicit consideration of the diversity of events within individual firms and bargaining units are not wholly reliable guides to economic policy and should be used with care and circumspection.

Part VII

**APPRAISAL OF EDUCATION
IN INDUSTRIAL AND
HUMAN RELATIONS**

A SURVEY OF THE GRADUATE CURRICULUM IN INDUSTRIAL RELATIONS

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There are probably few, if any, objective, quantitative, dollars-and-cents yardsticks against which evaluation of an educational program can be measured. In the nature of the situation, appraisal of the results of the graduate curriculum in industrial relations must rest to a substantial degree upon the goals of the appraiser and upon complex value judgments not readily susceptible to pricing.

Two heads are said to be better than one, however. It is possible to seek out and survey the opinions, attitudes, and experiences of participants to learn what consensus exist, what opinions are widely held, what experiences are shared.

The three principal participants, whose attitudes, opinions, and experiences we want to explore, are, first, the schools that offer training in industrial relations; second, the employers who hire their graduates; and third, the graduates themselves.

This paper will report the main highlights of such a survey. The main purpose of the survey was to attempt to determine how well the graduate curriculum—at the Master's or Ph.D. level—in industrial relations has met, is meeting, and is likely to meet our needs for people skilled in industrial relations management.

THE SCHOOL STORY

Forty-three schools, identified as institutions at which work in industrial relations was offered, were sent questionnaires to discover precisely what programs, if any, were given, with what requirements, and with what results. In addition, rosters of samples of graduates were requested.

Thirty-three schools replied.

Eighteen schools reported that they *did not* offer a graduate program in industrial relations. Of these, two were currently planning such a program, three offered an undergraduate program in the area only, and five outlined reasons why they were not offering, and generally did not plan to offer, an industrial relations curriculum. They expressed the opinion, however, that their programs in economics, business administration, and other areas, were preparatory for industrial relations work.

Three schools maintained industrial relations institutes, typically permitting students in other curricula an opportunity for research in industrial relations, but not offering degree in the area.

Twelve schools offered specific graduate programs in industrial relations, at the Master's level, the Doctor's level, or both.

These twelve schools constitute a small sample, but the group seemed to be representative of the major institutions in which an advanced degree in industrial relations is currently being offered.

Age of the Programs. The graduate curriculum in industrial relations is recent in origin. Half the programs reported were initiated in 1951 or later; three Master's programs and three Ph.D. programs are as recent as 1956 or later; only three programs existed prior to 1940.

Required Courses. Course requirements vary both in specificity and in content among the twelve schools. In several instances, course programs are worked out by the student's advisor or by an advisory committee.

In three schools, only general requirements are set forth, as, for example, "one unit in the research seminar in labor and industrial relations, five units . . . from appropriate courses in specialized areas of study, two units . . . [for] . . . a thesis."

In the remaining nine schools, considerable diversity in course requirements was noted. Certain common core concentrations did appear, however: personnel management (including industrial psychology, training, and human relations), labor-management relations, and wage administration, perhaps, among them. But the emphases, and the manner of subdividing content areas, differed to an appreciable extent. The comparisons suggested that there is probably a consensus of sorts concerning the main topical areas in industrial relations, but little agreement as to the dimensions and borders of its constituent fields. While the diversity of courses may correspond exactly to the diverse character of opportunities in the field, it is pertinent to note that the field has not yet been organized into the rather sharply defined subfields that tend to exist in such professions as medicine or the law, or perhaps even in such cognate content areas as psychology. Furthermore, one school may emphasize labor relations courses to the exclusion of personnel management, while another may emphasize human relations and personnel, with at most one course in labor relations.

Evaluation of Program Effectiveness. How do the schools themselves evaluate their accomplishments? The responding institutions

were invited to comment upon the effectiveness of the curriculum "in preparing graduates for work in industry, labor, or government," if they offered a curriculum in industrial relations, or, if they did not, to comment on their situation.

Among the twelve schools currently offering such a curriculum, eight offered evaluations, as follows:

. . . Four referred to successful placement of their graduates, with such typical comments as, "Letters . . . from [employers] would seem to confirm this judgment . . . [that] . . . the curriculum is valuable for preparing students for jobs in this field."

. . . Four schools expressed their *objective* as providing "an integrated interdisciplinary industrial relations background," and the conviction that this is effective, for example, "An integrated interdisciplinary . . . program can provide better total preparation than concentrated work within a single discipline."

Among the eighteen schools that do not have industrial relations programs per se, five commented specifically to the point, citing reasons why they do not. Underlying these comments was the theme that industrial relations is too narrowly defined a specialty: the student should have a broad "foundation and training in analysis" and in general business management; specific training should come when and as needed.

"There is no intention in the foreseeable future to offer a graduate-degree program in 'industrial relations.' . . . Graduate work should not be too narrow in scope. . . . Specialization is encouraged but only to the point that major and minor fields of interest are in combination sufficient to provide the student with an integrated background of business and management operations."

"We see no need for undergraduate or even graduate specialization in Industrial Relations. We feel that a broad training including English, history, economics, statistics, and business administration in general including accounting, is needed by a personnel administrator. We believe that after receiving a broad training an individual should have some experience in a company as an employee and as a supervisor before being assigned to personnel work."

The data from the schools thus presented suggest two sharply divergent, and somewhat conflicting, points of view. A more realistic interpretation might be that there exists a continuum, for which the

TABLE 1
Date of Initiation of Program

	Master's	Ph.D.
Before 1900	1	0
1901-1940	2	1
1941-1945	1	1
1946-1950	2	1
1951-1955	3	0
1956-	3*	3
	<u>12</u>	<u>6</u>

*One program is reported as a formalization of a concentration of courses that had been recognized as a unit for many years.

two end-points are, on the one hand, advocacy of a highly specialized program covering practices in industrial relations, and, on the other, advocacy of a generalized foundation curriculum in business management. The attestation of demand for, and success in placement of, specialist graduates in industrial relations is, on the face of it, persuasive, at least in a pragmatic sense, of the need for the specialist curriculum. The content of this curriculum may range from a group of narrowly defined subjects to reasonably broad basis discipline subjects. However, existence of the industrial relations curriculum per se does create a focus on occupational and career specialization that is less likely to appear in institutions not offering this curriculum.

INDUSTRY VIEWS THE CURRICULUM

Graduates of the industrial relations curriculum find employment on university faculties, in government, and in labor unions. But the majority of them are recruited into industry. For example, in a

TABLE 2
*Ratio of Industrial Relations Graduates
to All Graduates, Five Schools*

School	Master's			Ph.D.		
	Industrial relations	All M's	Ratio	Industrial relations	All Ph.D.	Ratio
			%			%
A	187	2,110	8.9	11	105	10.5
B	32	1,008	8.1	....	.....	.....
C	2	63	3.2	....	.....	.....
D	177	1,392	12.7	28	103	27.2
E	121	419	28.9	12	93	12.9
Combined	<u>569</u>	<u>4,992</u>	<u>11.4</u>	<u>51</u>	<u>301</u>	<u>16.9</u>

survey of 58 industrial relations graduates of the University of Minnesota,¹ Class of 1948, none was found to be teaching or in a labor organization. Eighteen were employed in industry in industrial relations; the remainder were in non-industrial relations jobs in industry. In a survey of 666 graduates of the New York State School of Industrial and Labor Relations,² of the 549 who were in the civilian labor force, 65 percent were in commerce and industry, 3 percent were in labor unions, 24 percent were in professional and related services (principally in education), and 8 percent were in government.

Accordingly, this survey was limited to industrial employers only, although it would be fruitful to explore at a later time the attitudes of labor unions and government, also.

The industrial relations directors of the 100 largest corporations in America, as listed in the *Fortune* Directory of the 500 largest corporations, were surveyed to discover what predominantly large companies thought of these programs. The sample was restricted to large companies since it was assumed they were most likely to have had experience with industrial relations graduates.

Seventy-five of the 100 companies responded to the survey, and 64 of these provided usable statistical data.

Descriptive Data. The companies ranged in employment from 2,000 to 250,000 employees; median employment (half the companies were larger, half were smaller) was 33,000. Their total industrial relations staff ranged from 6 to 4,000; the median staff was 200.

On this staff, the number of individuals holding graduate degrees in industrial relations varied from none to 105. Seventeen companies had no industrial relations graduates, and 19 had 6 or more. Twenty-eight companies had between 1 and 5 graduates on their industrial relations staffs. Three quarters of the companies had 3 or fewer industrial relations graduates per 100 industrial relations staff members. *In terms of numbers, therefore, individuals holding advanced degrees in industrial relations comprise a very negligible fraction of industrial relations management in large companies.*

The factor most closely related to the numbers of industrial relations graduates employed was the total size of the industrial relations staff; there was no significant relationship between a company's

¹ Roberta J. Nelson, "Industrial Relations Graduates Seven Years Later," *Personnel Journal*, Vol. 35 (April 1957), pp. 413-414.

² New York State School of Industrial and Labor Relations, *ILR Alumni Survey, January 1, 1956.* (mimeo.)

TABLE 3
Degree Requirements

	Master's level	Ph.D. level
Thesis or dissertation	8	6
Foreign language	2	5
Statistics	9	5
Other tool subject*	4	3
Work experience	2	1
None of the above	1	0
No answer**	1	1
No. of programs	12	6

* Generally accounting.

** A new program.

industrial relations personnel ratio (proportion of industrial relations staff to total company employment) and the proportion of industrial relations graduates on its industrial relations staff.

Recruitment and Training. Most companies are willing to accept college graduates without experience for the industrial relations function, and, if a company recruits individuals with specific background in industrial relations, it is somewhat less likely to require an undergraduate degree than a graduate degree. Forty-nine companies reported hiring college graduates without experience for the industrial relations function. Only 12 companies said they recruited undergraduate majors for industrial relations; 24 said they recruited graduate degree holders who had no experience.

The recruiting practices of the 64 companies parallel the kind of educational background preferred for entry into industrial relations work. Only about 1 out of 6 companies specifically prefers an industrial relations major; only 1 out of 4 has a strong preference for a degree in any one of such specified disciplines as business administration, law, economics, psychology, industrial engineering, or industrial relations; and over half of the companies have no specific educational requirement or preference.

Experience Requirements. About one out of five companies prefers a new staff member to have one or more years' industrial relations or related staff experience; about one out of five has no experience requirements. The remainder prefer non-industrial relations work experience of varied types: production or shop work, or line responsibilities, are the most commonly mentioned kinds of experience. The principal emphasis seems to be on general industrial experience, preferably in the same company, or in the line function

that the industrial relations activity services (e.g., sales, accounting, production), together with an interest in staff work.

Evaluation of Industrial Relations Graduates. The consensus among industrial relations directors is that a graduate degree counts in comparing two applicants *only if* they are otherwise comparable in terms of experience. Only five directors think that advanced training is superior to experience; seven think that experience is superior to advanced training.

Five companies say, "Industrial relations graduates . . . are superior to individuals with experience, but lacking the industrial relations degree."

" . . . Can go further fast—can get the experience needed for effectiveness in less time than would be required to gain the degree."

" . . . For specialists (Labor Law, Labor Economist, Industrial Psych) the more graduate work the better. . . . But for general personnel an A.B. . . . appears sufficient."

Four companies say, "They are about equal to individuals with experience, but lacking the industrial relations degree."

Eight companies say, "They are not as good as individuals lacking the degree but with experience of equivalent length to the training."

" . . . Applicants with industrial experience are usually considered superior to those with college training but no industrial experience because most college programs seem to be out of touch with the basic day-to-day problems that face the industrial relations staffs in business today."

Twenty-seven companies say, "An advanced degree would count only in comparing two individuals of about equal experience."

TABLE 4
Distribution of 64 Companies by Various Descriptive Measures

	Lowest	First quartile	Median	Third quartile	Highest
Employment.....	2,000	21,000	33,000	54,000	250,000
Total industrial relations staff.....	6	75	200	316	4,000
Total no. of industrial relations graduates.....	0	0	4	6	105
Ratio of industrial relations graduates to total industrial relations staff.....	0.00	0.00	1.33	20.00	3.03
Industrial relations personnel ratio.....	0.05	0.24	0.60	1.03	15.00

“ . . . We would be seeking graduate degree recruits only occasionally for staff and specialized jobs, and would always be considering them along with available bachelor’s degree personnel with considerable company experience.”

Twenty companies refrained from choosing from among the alternatives offered, frequently because of lack of experience with industrial relations graduates. Some indicated, however, that they did not think a valid generalization could be made.

“ . . . Impossible to generalize. A good industrial relations man must possess certain inherent qualities of character and spirit which are not products of either education or experience. Given these, he may achieve success by experience plus education or by experience alone. College training in industrial relations is not necessarily the best formal education for the field.”

Many companies acknowledge the value of formal graduate training in industrial relations, but insist that experience, interest, and personality factors are of equal—or greater—importance. Graduate training is more frequently seen as an aid to later success than as an advantage in initial placement.

TABLE 5

Distribution of 64 Companies by Number of Industrial Relations Graduates Against Total Industrial Relations Staff, and by Ratio of Industrial Relations Graduates to Total Industrial Relations Personnel Ratio

A. Number of Graduates Against Total Industrial Relations Staff

No. of Grads.	Total Size of Industrial Relations Staff				Median total industrial relations staff
	75 & Under (Lowest quarter)	76-200 (Second quarter)	201-316 (Third quarter)	317 or over (Highest quarter)	
None	8	4	3	2	85
1- 2	3	4	2	2	150
3- 5	3	5	6	3	200
6-19	3	2	3	4	262
20-Over	0	0	2	5	642

B. Ratio of Graduates to Industrial Relations Personnel Ratio

Ratio of Industrial relations grads. to total industrial relations staff	Total industrial relations staff ratio				Median total industrial relations staff ratio
	0.24 or Under	0.25-0.60	0.61-1.03	1.04 or over	
0.00	8	4	2	3	0.25
0.17-1.33	1	3	2	9	1.12
1.34-3.03	1	4	7	2	0.74
3.04 or Over	6	6	4	2	0.33

Evaluation of the Program. No director felt that the advanced industrial relations programs were "meeting the needs of industry perfectly," but only four felt that they were failing altogether. The remainder were almost equally divided above and below a more or less neutral attitude: more tended to be critical than approving. The principal criticisms were that the training was too academic, unrealistic, and remote from practical industrial relations administration, and that the programs were too narrow in scope—they felt that breadth of education should be emphasized.

Eighteen companies say, "These programs are good in most respects, but should be changed in a few." The principal suggestions made were for provision of internship or work experience, and greater emphasis on "practical" case study methods.

Twenty-five companies say, "These programs provide variable, uneven, and sometimes inadequate training."

" . . . Many concepts of Industrial Relations are untested as far as their application in many segments of industry are concerned. A practical approach based on education and varied plant experience should be emphasized in the creation of Industrial Relations policies and practices."

" . . . Industrial Relations people should be highly educated in the strictly academic sense—as well as professionally. More emphasis on broad education and less on narrow training are needed."

Four companies say, "These programs are generally failing to meet the needs of industrial relations management in industry."

" . . . Too much emphasis appears to be given the academic approach to the industrial relations field. Research techniques and studies take precedence over administration and organization."

On the balance, industrial relations directors are inclined to regard an advanced degree as a useful qualification only if "all other things are equal"; opinion is almost equally divided into either a *mildly* negative, and a *mildly* positive evaluation of the adequacy of the programs themselves in meeting the needs of industrial management. One important factor in this evaluation is the, as yet, limited experience companies have had with industrial relations graduates, particularly at the advanced degree level. It is also clear, however, that there is a strong consensus concerning the irreplaceability of business experience, and substantiated agreement that academic em-

TABLE 6
*Company Distribution by Attitude Toward Graduates and
 Opinion of Industrial Relations Training Programs*

Opinion of industrial relations training	Attitude toward graduates					Total No. of companies
	Graduate training superior to experience	Graduate training equal to experience	Experience superior to graduate training	Degree counts only if experience is equal	No answer	
Programs meet needs perfectly	0	0	0	0	0	0
Programs good in most respects	3	2	1	10	2	18
Programs variable and uneven	2	2	2	12	5	25
Programs fail to meet the needs	0	0	2	2	0	4
No answer	0	0	1	3	13	17
Total companies	5	4	8	27	20	64

phasis on theory is not a useful basis for effective practice. Among those who approve, as well as those who disapprove, these programs, the single most frequent suggestion was that they should be modified to include an internship, work-study, or other on-the-job experience phase.

WHAT THE GRADUATE THINKS

Twelve institutions cooperated in providing rosters of graduates in industrial relations; nine were schools offering a graduate degree in industrial relations, three did not offer the specialized degree. In all, 529 graduates were sent questionnaires, and 305—about 60 per cent—replied with statistically usable data.

Of the 278 graduates holding industrial relations degrees:

- 165 or 59% are currently holding industrial relations positions, of whom only three are in labor unions
- 89 or 32% are in non-industrial relations positions
- 17 or 6% are teaching industrial relations in colleges
- 7 or 3% are students

Of the 27 graduates who do not have industrial relations degrees:

- 16 or 59% are currently holding industrial relations positions
- 11 or 41% are in other positions

Job Experience. Of the 305 graduates, 233 (including those currently so employed) have had experience in an industrial relations function (including teaching)—ranging from less than 6 months to

TABLE 7
*Distribution of Graduate Student Respondents, by Kind of Organization
Employed With and by Current Occupational Affiliation*

	Currently employed in industrial relations			Currently not employed in industrial relations			
	Total	Industrial relations degree*	Not industrial relations degree	Total	Industrial relations degree*	Not industrial relations degree	Total
Self-employed	6	4		4	2		2
Mining	3	2		2	1		1
Construction	2	1		1	1		1
Durable goods manufacturing	88	63	8	71	14	3	17
Non-durable goods manufacturing	54	35	5	40	11	3	14
Transportation, communications, public utilities	18	12		12	6		6
Wholesale and retail trade	12	6	2	8	4		4
Finance, insurance, and real estate	10	5		5	4	1	5
Educational institutions	55	22		22	31	2	33
Government, except education	26	19		19	7		7
Labor union	3	3		3			
Service and miscellaneous	22	11	1	12	8	2	10
Not reported	6	6		6			
Total	305	189	16	205	89	11	100

* "Industrial Relations Degree" includes students from the nine schools granting such degrees; "Not Industrial Relations Degree" includes students from the three schools that do not grant such degrees.

26 years. For the group as a whole, the mean length of such experience was $5\frac{1}{2}$ years.

Because of time and space limitations, I would like to direct attention here to only one item of this survey, the graduate's comments on the relationship of his studies in industrial relations to his career, and his comments on the training available in the industrial relations curriculum.

Evaluation of Industrial Relations Training. Individuals who hold graduate degrees in industrial relations almost all believe that their education is of direct and significant value to their jobs, whether they are currently employed in industrial relations or not. Over 80 percent of the graduates in each employment category commented favorably on the training itself, and on its relevance to their careers. In contrast, slightly less than half the graduates of the three schools that do not grant degrees in industrial relations were satisfied with their training, if they were presently employed in industrial relations. It should be emphasized, however, that only a small number of respondents—fifteen in all—from such schools were in industrial relations jobs.

Specifically, what do graduates say?

First, many graduates considered their training and degree were the main reason they were hired in the first place. Furthermore, many felt that they have advanced over others specifically because of their training.

Second, the complaint is frequently registered that management—"practical-minded old-line management"—does not appreciate the professionalization that the graduate sees occurring in industrial relations. "Business doesn't like 'green' graduates who are specialists," "too much emphasis is placed (by industry) on experience," there is need for a "mental revolution" on the part of management to appreciate the value of professionalism.

Third, the industrial relations curriculum is credited with providing a "broad background," relevant both to work in industrial relations and to work in general management. However, the concepts taught in school are frequently described as "not too realistic or practical," or "too theoretical." "Techniques" courses and "how-to-do-it" approaches are "useless in industry"—what is taught on the college campus does not seem to reflect current industrial practice. In many schools, respondents frequently commented that their training in industrial relations was not adequate for work in labor relations, although it was useful for personnel administration. On

the other hand, graduates of one school found their training "too much labor relations oriented"—and even "too labor oriented!"

A fourth major theme, related to the "academic" nature of the university approach to industrial relations, was that a work-study arrangement of some sort would afford more realistic preparation for the "practical" world of business.

While this brief survey does not do justice to the rich variety of replies from the more than 300 graduates, it does provide a basis for relating the picture as seen by these graduates to that drawn by the schools from which they come, and the employers who, at least in some instances, hired them.

First, we must note that the graduate industrial relations curriculum is a recent development in education, that the graduate has been out in industry only a relatively short time, and that only a very small fraction of all industrial relations practitioners have been recruited from this source. This newness must constrain us to caution in rendering any final judgments.

Second, industrial relations as a separate and distinct profession is implied by the existence of the graduate curriculum, and graduates of that curriculum tend to see it that way. Substantial numbers of today's industrial relations directors do not seem to agree, however. Both in their own recruitment and upgrading requirements and practices, and in the reflection of these requirements in the comments of industrial relations graduates, "practical experience" and other factors loom larger than professional qualification as expressed in educational attainment. There are, of course, exceptions: for example, the employer of the man who feels he would not have been hired if he did not have a degree.

Third, and quite possibly a reason for the limited value attached to professional graduate study, that study is frequently conceded to have virtue as a "broad background," but found to be lacking in firm reality contact when it tries to get down to details. A principal proposal to remedy this situation is to introduce a work-study combination into the curriculum. It might also be suggested that if schools are going to teach "how to," they had better take another look and discover how things are really done—if only to teach students what to expect and how to correct us in industry!

APPRAISAL OF EDUCATION IN INDUSTRIAL RELATIONS¹

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Industrial relations education may be characterized by its fuzzy objectives. It is not unique in this regard, but this fact makes any attempt at evaluation of industrial relations training highly questionable. Add to this a generous portion of confusion with respect to definitions and criteria and you can rightly conclude that here we have another case of "the blind leading the blind." This, of course, is a favorite and traditional role of university professors.

It may be helpful at the outset to attempt to differentiate two basic types of training, job and citizenship. Job training may be further subdivided. First, training objectives, programs and criteria may differ for line and staff positions. Second, staff positions may be differentiated in terms that for the moment may be called "professional" and "sub-professional."² At least this much differentiation is a minimal necessity—who would argue in favor of identical courses in labor relations for a Ph.D. candidate in training for research and teaching in industrial relations and a would-be housewife in the attractive form of an arts college sophomore seeking culture and a husband.

Training must be differentiated by type, obviously, because various programs and courses have different objectives and presumably different criteria for evaluation. What is not so obvious is why we do not make our evaluations with due regard for this principle. Here the fault does not lie entirely with the academician.

Take, for example, a university program designed to train personnel managers for industry. Now let's ask the question, "How effective is our training?" At this point we must decide upon our criterion or yardstick. Using a pragmatic approach we might decide to utilize the ex-student's *job performance* as the criterion. While this sounds simple, it is not. Few companies are in a position to evaluate the success or contribution of staff personnel people, and presumably

¹ I'll not discuss appraisal of human relations because I don't know what human relations means and because I try to avoid profanity in speeches and articles.

² Professional jobs include teaching and research, industrial relations directors, personnel managers, etc. Sub-professional jobs include personnel technicians, interviewers and various types of personnel assistants.

they cannot evaluate the success or contribution of their personnel people unless they can evaluate their personnel program. I know of no satisfactory general appraisal system for this purpose. Hence, at best one could get a hodge-podge of subjective impressions varying from company to company and ex-student to ex-student, hardly the kind of yardstick we prescribe as essential or adequate for our graduate students in their research projects.

It is conceivable that we could compare job performance of persons in industrial relations departments in terms of (1) those who have had college training in industrial relations, and (2) those who have not. At an earlier and more naive stage in my life I might have supposed that a large corporation hiring many college graduates trained in industrial relations would make such appraisals in an attempt to see if our college trained practitioners are worth their premium price. If there is such an evaluation I do not know of it. Perhaps such comparisons come under the heading of: (1) self evident truths, or (2) trade secrets. In any event most of us college boys probably should conclude reluctantly that an empirical validation of our industrial relations training is not possible at the present time because the practitioners can't or don't or won't separate the sheep from the goats. Other professions have an advantage over us—physicians, for example, presumably know when their patients die.

We stand in an equally unfortunate posture with respect to evaluation of our *citizenship courses* in industrial relations. True, some of these *allegedly* have been appraised through that ultimate of ultimate tests, the "after-course" student opinion survey. And when these questionnaires show us that we, as instructors, have really got "it"—the average professor hardly can be expected to ask for more. Facts are facts, and percentages of favorable response the true Balm of Gilead.

Now of course we just possibly might be better off using more adequate and appropriate criteria and objectives in appraising our citizenship industrial relations courses, and I'll be the first to confess that I don't know what I'd use. Should we find out what proportion of group X does not know the major provisions of the Taft-Hartley Act? Or do we need *behavioral* rather than informational indexes, e.g., what percentage went to the polls to vote in an election on right-to-work laws?

Let me summarize briefly what I've tried to say so far. First, industrial relations training is of various types (e.g., job versus citizenship) and each type should have different objectives, training pro-

grams and criteria. Second, I believe the criteria should be constructed in terms of *behavior* of those trained, e.g., performance on the job. Third, I know of no objective appraisals of the effectiveness of industrial relations training in behavior terms. I do know, for example, that almost all of our M.A. in industrial relations graduates at Minnesota do go into industrial relations jobs. That is a crude index of evaluation of our training, I'll admit. But it is hardly adequate. Perhaps as we get into longitudinal studies of these people (which we now have underway) we'll begin to get some effective appraisals. Right now we know we can sell our product but we don't know if having our product helps the purchaser or not. Since we have managed for so many years without evidence, perhaps I can offer my own impressions and pseudo-evaluation of current and past collegiate training in industrial relations.

(1) Much of it has been too clerical and technical, especially at the undergraduate level. The student has not had a chance to acquire a basic foundation in the broad fields of human behavior.

(2) Much of it has been too concentrated in a single discipline, e.g., business or psychology. Supposedly, industrial relations deals with human behavior in employment in economic institutions. The business school student may know much about economic institutions and practices—the psychology student may know much about human behavior. And both probably know very little about industrial relations.

(3) Our courses are often too broad in scope. They may include job training for both graduates and undergraduates as well as citizenship training in the same course. This saves money, a worthwhile objective in its own right.

(4) We attempt to meet some of the non-day school training demands with a shabby variety of short courses, institutes, and night classes that would chill a mortuary attendant. Fancy brochures, clichés and inadequate instruction can be sold by academicians to those bored with their jobs who welcome a vacation and to those who mistake course certificates for ability and potential. Of course it's not respectable for "regular" university professors to be concerned with such trade school aspects of education. We can handle that problem by ignoring it. Or we can appraise results of such training by using the same "ladies aid" approach we use to appraise our colleagues for promotion. Who is there among us who would dare insist upon objectives, facts, and yardsticks?

Indeed here is one place where we teachers of industrial relations

University of Minnesota
GRADUATE STUDENT ENROLLMENT
1953-1958

Year	B.A.	Econ.	I.R.	Total
1953-54	62	83	4	149
1954-55	74	79	9	162
1955-56	93	64	33	190
1956-57	70	66	48	184
1957-58	98	60	69	227

University of Minnesota
DEGREES GRANTED

	B.A.		Econ.		I.R.	Total		Total
	Masters	Ph.D.	M.A.	Ph.D.	M.A.	M.A.	Ph.D.	
1953-4	8	2	15	4		23	6	29
1954-5	16		11	2		27	2	29
1955-6	18	4	14	4	3	35	8	43
1956-7	14	3	4	3	10	28	6	34
1957-8	9	2	5	2	21	35	4	39
	65	11	49	15	34	148	26	174

can clasp hands with our brethren, the practitioners. We both can rest secure in rightful assurance that a "union card" is evaluation enough. You boys in the real world settle for a guy with a college degree in industrial relations—we in the hallowed halls will buy a Ph.D. from another school. In that sense at least, our training is effective; it brings forth the conditioned response of automatic non-cerebral evaluation.

What then, if anything, can be done to increase our effectiveness in industrial relations training? First, we must clarify our objectives. At Minnesota, for example, we are establishing six major areas of industrial relations training:

- 1) general citizenship training in industrial relations,
- 2) supplementary management training (for line managers),
- 3) special courses for union officials and staff members,
- 4) pre-professional training,
- 5) professional training, and
- 6) refresher training for experienced practitioners.

We are setting up courses of study for all of these within the *regular* university framework. This training will be supplemented by night school courses, conferences, and institutes. But the important fact remains that we feel we need to make such provision within our regu-

lar day school program. Hence we are designating new courses, new teaching materials and the like. We have discontinued our old undergraduate specialization designed to yield an industrial relations major. We are shifting to heavy basic liberal arts pre-professional training at the undergraduate level. Those going into professional staff jobs in industrial relations get their specialized industrial relations training at the graduate level, with a decided research emphasis.

We and Illinois are paying special attention to evaluation of our candidates for graduate training. We find the Miller Analogies test is a most useful predictor of success in our school program.

Pre-professional training can be done by smaller colleges who do not have industrial relations specialists. Smaller colleges can and should expand their citizenship courses.

The larger schools should and must provide the specialized professional training in industrial relations. They should work closely with industry, government and unions to provide professional internships in industrial relations. Work experience per se is not a substitute for this. The larger schools must uproot older traditional training arrangements within a single department (e.g., business schools) and replace them with truly interdisciplinary specialized training and research units. These units must not become mere amalgamations of "applied" disciplines, but must be based on solid institutional arrangements with the basic behavioral sciences from biology through psychology, sociology, anthropology and other such disciplines. They must recruit and train faculties for the several different types of industrial relations training. They must provide a research base to advance knowledge and understanding.

Above all they must learn much more about the needs of the customers—those in industrial relations jobs, and citizens. We at Minnesota have made a few probes in the direction of job descriptions for industrial relations practitioners in industry, government and unions. Most of you are familiar with our studies of "Jobs in Industrial Relations"; a new revision will be available early in 1959. We are remiss, however, in not making similar clarification with regard to citizenship training.

Goals and objectives of industrial relations must not be determined *per se*, but in relation to the goals and objectives of organizations. Thus we in the academic field must do much more research in this area before we can devote much time profitably to the question of what makes a good industrial relations curriculum.

We need to measure not only current job and citizenship practice and needs but must devise ways of determining future needs to provide the kind of training needed in the future. This suggests that longitudinal rather than cross-sectional evaluation is probably a necessity. In this we will need much more joint cooperation with practitioners and graduates. Our current studies wherein recent graduates evaluate their program are exceedingly helpful in this regard.

I can think of no more appropriate conclusion for this discussion and appraisal of Education in Industrial Relations than to quote the last paragraph of one of the first (if not the first) textbooks ever published in this field. Its appropriateness for the present group of professional teachers and professional practitioners of industrial relations may be apparent when I identify its author—the immortal Nathan W. Shefferman.

“The taking of patent medicines is absolutely foolish . . . pouring into the stomach of medicine, the ingredients and action of which are entirely unknown to them is stupid, even wicked procedure.”³

³ From Nathan W. Shefferman, *Employment Methods*, New York, The Ronald Press Company, 1920, p. 560.

APPRAISAL OF EDUCATION IN INDUSTRIAL AND HUMAN RELATIONS

STANLEY H. RUTTENBERG

Department of Research, AFL-CIO

I should like to approach the subject for this morning through the “back door”—not necessarily as a representative of the viewpoints of my colleagues in the labor movement, but as an individual who has spent twenty years in the labor movement. During this time, I have often worked closely with, have observed, and have always maintained an interest in the field of education in industrial and human relations. Though this session is intended to be “objective and critical,” I hope that this merely means that different viewpoints will be represented. I cannot—and I do not believe the other participants can—be really objective about this field. I can discuss the subject only from a practical point of view, from the standpoint of my own observations of practical needs.

Traditionally the labor movement has been “on the outside” of university training in industrial and human relations. The paradox of the “out-group” being a principal object of study of the programs—the union as a force motivating a whole series of studies and determinations of ways to work more effectively with people in an increasingly industrialized society—has been discussed time and time again. Certainly the labor unions’ attitudes toward university attempts to do research and to reshape methods of studying these complicated fields of human and industrial relations, with good reasons, has shifted in varying directions—suspicion, cooperation, understanding and withdrawal, again some cooperation with certain programs.

Because the labor movement contains no large, ready “market” for employing the graduates of industrial and human relations schools, it is not reasonable to expect that universities would be particularly concerned with preparing their students for work on union staffs. Management hires industrial relations men and has jobs to offer them. The internal programs of these schools of industrial relations, therefore, while much of their study must be devoted to unions and to union-management relations, have been and will continue to be oriented *toward preparation for management*. This is an obvious fact of life.

Unfortunately, some of the universities, in striving for academic objectivity, fail to admit this practical truth even to themselves. One graduate, of a prominent industrial relations school, identified himself as an ideal applicant for a job with a labor union because he was "objective"—neither pro-management nor pro-labor.

This points up one of the underlying fallacies, in my judgment, of the whole approach to industrial and human relations work, because many of the problems and relations of labor and management do not lend themselves to objective analysis.

Such a young man, trained in misplaced objectivity, was badly prepared for the practicalities of the modern world. I hope his case is an exception, but I feel that it is not.

While the university itself, of course, should strive for objectivity of presentation, certainly its students should not be misled about this non-objective phase of American life. If students are to be prepared at all to work in the labor relations field, let them have *adequate and realistic preparation* in the traditional academic disciplines of economics, of sociology, of political science, of psychology before they even attempt an examination of such an indefinite and imprecise study as industrial or human relations. The latter may well be put off until graduate school study. By that time, they will know that objectivity is laudable, but that employers in industries or the unions of this nation will not be impressed by the denial of human, emotional identity with one side or the other.

While the labor movement does not offer a "market" for graduates of internal programs of industrial relations schools, it has a stake in the total programs of many, particularly those which use public funds. Unfortunately, in getting funds for education in labor and industrial relations, a similar misconception of "objectivity" is sometimes used with consequent budget distortions. The failure to admit that the internal program is management-oriented leads to an attempt to "balance" external programs between labor and management, or between labor, management, and the public. The share devoted to the greatest need of the labor group—*actual extension services for workers both on the campus and in the cities and towns of the state*—is therefore often pared down to a small fraction of the total budget.

For example, three-quarters of the budget may be spent for internal programs (management-oriented by necessity) and the remaining one-quarter, as "objectivity" demands, may be spread

among extension services for labor, management and public programs—one-third of that quarter for each group.

I therefore wish to approach the subject of evaluating industrial, labor and human relations education through the back-door. I feel that extension work, now carried on by many industrial and labor relation schools with rank-and-file workers, is of primary importance, and should be given much more consideration. I feel that present work in industrial, labor and human relations institutes leaves much to be desired. I also believe that since unions offer so little market for graduates of these schools, it is realistic to establish budget priorities differently, particularly if funds for work in the total area are as limited as they seem to be at present. In listing these priorities, I wish to emphasize that usually these are public funds, being appropriated for the benefit of *all* the citizens of a state out of tax money:

1. The highest priority should be providing services in off-campus education with rank and file labor groups in cooperation with trade unions. The needs of worker and adult education have been studied carefully and exhaustively by such groups as the IULEC and by some of the universities. Certainly progress has been made. But the fact remains that each study states that among the reasons for the failure of expansion of such programs is the lack of funds available for this purpose. *Labor education is basic to industrial and human relations.*

Labor education cannot take place in traditional academic fashion in four-year courses on campus. Funds are always available for management programs either from management or from the legislature. They have not been made available to labor.

2. The second highest priority should be the on-campus, non-university labor education training programs. But admittedly this is limited in terms of location and convenience of workers.

3. Third, in terms of priority, would be labor-management forums where objectivity could be presented to the observers in the most realistic way—by seeing both sides in operation. Discussions between labor and management representatives *on specific, narrowly defined topics* can also contribute to the education of the spokesmen for each group and to their understanding.

4. Fourth priority on my list is the money for industrial relations on-campus schools, where four years of preparation principally for management employment can be carried on with adequate funds for carefully analyzed programs. To the extent that these schools

are supported by public funds, it might be helpful to have efforts made toward establishing more uniformly-evaluated curriculum even here, so that some of the traditional disciplines are *more actively integrated into the program*.

Without mentioning names, I think some university programs have included as whole colleges extremely questionable subjects of academic achievement. Between Parkinson's law and the seemingly inexhaustible variety of areas for academic experimentation in a relatively new field of study, imbalances in the *depth* of subject matter presented have in some instances become a serious problem.

If I did have many job opportunities in my office for graduates of such schools, I should prefer that the graduates have better grounding in the basic tools of the trade: economics, statistics, political science—not in the details of the General Motors-UAW contract of a specific year which, after two semesters of study, one student could quote almost verbatim.

5. Fifth in priority—and I do not minimize its importance, but only its priority in relation to other needs when funds are so limited for ILR schools—would be research. Many aspects of human and industrial relations have had the benefit of exhaustive research. Evaluations of this research have been presented quite adequately by the IRRA within the past few years. I shall not discuss them in detail. Recently some excellent surveys of specific union relationships, which have been helpful to the labor movement, have been made by university groups working with unions.

And I should like to emphasize the word “with.” Too much research in the past was either “on” unions, “for” unions or “against” unions. I think sufficient evidence has been developed that truly academic research about human and industrial relations in regard to unions must be done—objectively, and here is where objectivity belongs—in practical efforts with unions. This type of research will be more successful, if based on objective observations of students with prior training in traditional *academic disciplines*.

In addition to these priorities, I think it is important that there be a division between labor and management training, a clear line of demarcation in the organization of the school. Preferably, I think there should be one school for each, tailored to the needs and money obtained from the legislature separately for each school. Where this separation has been effected, it has been quite successful. Certainly the suspicions of the labor groups are allayed in working with a

university program or part of a university program specifically for labor purposes and are aroused by a combined program.

In other words, quite simply, my proposal is this: To the extent that funds for ILR schools are limited by state appropriations, I should prefer to see more of such funds used for extension service work in cooperation with trade unions and less for four-year on-campus student training, and for some questionable types of industrial and human relations research. As more funds become available, I should like to see them used for the types of programs I have outlined in my priority listing. But, at the same time, I would alter the type of on-campus, four-year training so that actual industrial relations courses would be postponed until the student reaches the graduate level. I would also alter the type of research now being done.

For the present, however, and for the foreseeable future, I propose that much of the work of the ILR schools be reoriented with greater concentration on off-campus training of workers in cooperation with trade unions.

SOME OBSERVATIONS CONCERNING EDUCATION IN INDUSTRIAL AND HUMAN RELATIONS

IRVING H. SABGHIR
Ford Motor Company

In the brief time allotted, I shall try to examine today's subject from the point of view of one who is a product of education in industrial and human relations and now a practitioner in the field.

The "School" or "Institute" or "Center" of industrial relations was largely unknown 20 years ago and has come into significance only in the last 10 or 15 years. It is part of the recognition of the importance of industrial relations in our politico-economic fabric.

I should like to limit myself to an examination of the question: what is the best or "ideal" education for a career with industry or labor in the field of industrial and human relations? And of course, the corollary question is: how can education in industrial and human relations best serve the needs of industry and labor? I believe that to answer one question is to deal with the other, since that education which best prepares one for a life's work in industrial relations is, perforce, the kind of education which will best meet the needs of the practitioners. Specifically, I want to deal broadly with the issue of undergraduate and graduate schools of industrial relations. Is there a place and a need for either or both of them in education for industrial and human relations?

I think it is fair to say that industrial relations is unquestionably a social or behavioral science. In addition to dealing with the basic problem of a division of the economic pie, it deals with interpersonal and inter-group relationships and problems of social change. Consequently, it is a field which draws heavily upon a knowledge of economics, sociology and psychology. To me, second only to politics and public administration, industrial relations represents the most complete symbiosis of the behavioral sciences into one field. Of course, since industrial relations is a study of man in a unique social organization and the power relationships involved, we must have a legal framework within which the organism functions. Thus, the study of the law, as enumerated in public policy pronouncements governing the relationships between employer and employee is also an area of knowledge important to the field of industrial relations.

It is doubtless clear, even at this early point in my discussion, that I am envisaging education for industrial and human relations in the broadest possible terms. It is this broad-gauged perspective kind of view which I feel is, in long-range terms, most serving both from the point of view of the career-minded individual and the interests of operating personnel in management or labor.

This view is, to be sure, little more than a complete expression of a belief in a basic liberal arts education, with a concentration in one of the behavioral sciences. My emphasis on the behavioral sciences is self-evident because of the nature of the field. The emphasis on a liberal arts education stems from my general view of the purpose of a college education and what I think defines an educated man. This view also implies that undergraduate training particularly, and to a much lesser extent even a graduate program, which is heavily biased in favor of the "how to" or what might be called the "cooks and bakers" courses is not an appropriate education for one who is interested in pursuing a career in industrial and human relations. Collaterally, to my way of thinking, a person with purely such a narrow background does not constitute *long-term* value for the practitioner in industrial relations.

Now, what is the import of my remarks with respect to our schools of industrial relations? Does this mean that I see little or no usefulness for such institutions, and that where such schools are supported by public funds, taxpayers could get more utility out of their school tax dollars by dropping such institutions where they exist and transferring the savings to liberal arts colleges? No; this is not by position. I feel that the gathering together under a single coordinated program, of a faculty and student body for the purpose of furthering knowledge and skill in this broad field of industrial relations is a very useful, desirable, and even necessary thing. For too long a job in industrial relations, particularly in management, has often been the second to the last resting place for persons who were unsuccessful in their own field, and who, for one reason or another, had to be taken care of by the organization. After all, it was argued, anybody can deal with people. You don't need any particular skill or knowledge or ability. As long as you can "make friends and influence people" that's all that matters. Our profession did not attract persons of rank and ability and had little stature in the organization. It is only of late that we are beginning to see a real professionalization of industrial relations staffs in management and trade unions. And it is only in the last decade or even less

that the industrial relations function in management has begun to grow in importance and competence and attract top-flight personnel. Certainly this change is not due purely or even primarily—or perhaps even at all—to the existence of schools of industrial relations. But the fact that such institutions and centers exist has, I believe, helped lend increased importance and stature to the industrial relations function, and, doubtless provided more competent and sophisticated personnel.

But granted that the schools of industrial relations have made a positive contribution to the field of industrial and human relations, is there a place for an undergraduate school of industrial relations? In other words, should professional and technical training in this field be limited to the graduate school level?

My emphasis on a basic liberal arts education, as preparation for a career in industrial relations, would suggest that I believe there is no place for an undergraduate school of industrial relations and that specialization, if any, should come at the graduate level. Let me make it clear that although I do believe that specialization should take place at the graduate level, I think there is a place for an undergraduate school of industrial relations. I feel that an undergraduate school of industrial relations can prove successful and useful provided (1) its curriculum is molded around a basic liberal arts programs, with emphasis on the behavioral sciences of economics, sociology and psychology; (2) it includes certain specific courses, such as, labor history, business organization and management, union organization and management and collective bargaining, intended to give the student a perspective into some of the problems and issues in our field and an understanding of the needs and motivations of labor and management; (3) there is specific on-the-job training in industry and labor; and (4) the faculty never ceases to be alert to the possibility of parochialism or a trade-school approach creeping into its program. If this can be accomplished, if the undergraduate school of industrial relations is careful in guiding its students so that upon graduation they are fundamentally persons with a liberal arts background, have acquired the ability to evaluate and appreciate the relevancy of research by the graduate schools in this and related fields, and developed an understanding of the problems and issues in the field of industrial relations, then the school can make a real contribution to the field. Moreover there is the factor of motivation. The high-school graduate who consciously and deliberately seeks an undergraduate school of industrial relations

is probably more interested in the problems of our field. I think the graduate of a college with such a program who does not pursue graduate study may be somewhat better prepared for a career in industrial relations than say an equally intelligent graduate of a regular arts college who majored in a related behavioral science but who did not have some of the courses which I think are essential to a philosophical understanding of the major developments and issues in our field, and perhaps of greater importance, did not have the constant exposure to and benefit of persons closely associated with the field of industrial relations.

The graduate school of industrial relations is clearly the place for specialization in a particular phase of the field. And certainly I think we should encourage our students to pursue graduate studies since they broaden and also sharpen their skills and knowledge in the field, and may be more immediately useful to their future employer, be it a company or a union. But it should also be remembered that particularly in our field, if possible, it might be well for the student to defer graduate work until he has gained some experience on the firing line. In this way his specific graduate work in industrial relations will take on more meaning and he will also be in a better position to evaluate a proper graduate program for himself both in terms of his needs and interests.

I cannot forbear to make a general comment concerning the study of law in industrial and human relations. As I have indicated earlier, given the power relationships involved, there is no question that the study of the law is important in our field. A study of the law, moreover, teaches a respect for the sanctity of contracts and agreements between parties and the need to follow specified procedures. This is obviously quite essential in industrial relations. I would just offer this single caution, however. Social change is inevitably reflected in the legal structure governing the society or an organization. But often the law lags behind the developing changes and only ultimately merely affirms and reinforces the new situation. In the interim, however, social stress and a disrespect or disregard for the law can result if the "law" acts as a stumbling block to change and progress. This phenomenon can easily occur in the field of industrial relations. I think it is therefore important to impart to the student that in a collective bargaining relationship the forces of change must sometimes prevail and if necessary the "law," meaning the collective bargaining agreement, be changed,

perhaps even between negotiations, if we are to avoid real stress in the collective bargaining relationship.¹

In the not too distant past, industrial relations was but an exercise in brawn and stamina. Fortunately, this era is now largely only of historical interest. Industrial relations today recognizes the usefulness of the human intellect in solving our problems of the work-place.

I am persuaded that the more labor and management can draw upon common sources of supply—that is, the various schools of industrial relations—for their professionals in industrial relations, the more the practitioners in the two interest groups will have a common basis for understanding the problems and issues in our field and the needs and motivations of each other. In this way I think we might perhaps begin to limit the areas of disagreement to the fundamental economic issues.

Education in industrial and human relations is still in its teens and much experimentation remains before we can be confident that we have arrived at the optimum solution to the problem of education in this field. I am satisfied that there is a place both for undergraduate and graduate training in industrial relations. Of course, as I have indicated, I believe that any undergraduate program must be premised on a liberal arts approach, with emphasis in the behavioral sciences of economics, sociology and psychology.

There is happily a great diversity among the various schools offering a program or special courses in industrial relations. Perhaps out of this crucible of experience, and such continual evaluations as we are having today will we ultimately develop an educational program which might become a standard for education in industrial and human relations.

¹ This is not intended as an open-sesame to a "living-document" theory. Rather it is limited to those rare situations when special adaptations are appropriate in light of certain new conditions; e.g., a special seniority agreement during a period of heavy layoffs providing for the recall of certain high seniority employees to displace other junior employees.

DISCUSSION*

Professor Chalmers (Illinois) thought that the session had been very useful and hoped that future sessions would deal even more specifically with the issues raised. Both Mr. Caples and Mr. Ruttenberg had been excellent *provocateurs*. However, he would have preferred Mr. Caples' own opinions to the digest of answers to his questionnaire. His respondents seemed to be speaking of the past and present, whereas the problem was one of the *future* of work in industrial and labor relations and how the universities could best fit students for this future.

Mr. Ruttenberg's thesis seemed to be overstated. Certainly the curriculum at Illinois did not emphasize management orientation. The fact that the majority of graduates were to be employed by management did not imply that the curriculum must be management-oriented. As Professor Chalmers saw it, a university was not a trade school for jobs in industry or with unions or with government. The teaching should be less concerned with providing tools than with broadening the perspective of the student. Needed was an inter-disciplinary effort to convey a comprehension of the broad area of industrial relations, a realization of the conflicting values, and the ability to maintain an independent perspective. Thus equipped, a student should have the ability to play a creative role in whatever type of organization he might eventually be employed.

Professor Haydanek (Loyola) found fault with the attitudes of both unions and managements. Graduates interested in working for a union were told to get a job in a plant and then work up in the union—hardly an attractive prospect for one who had spent years in preparation. Managements talk much about the need for a liberal education but actually tend to prefer specialists.

Mr. Allen (Joint Council on Economic Education) summarized the findings of a recent survey by his organization.

Mr. Ruttenberg, in an extension of his prepared remarks, suggested that the following types of university research would be of practical value to unions: (1) effective participation of members in their unions, (2) community participation by unions, (3) fair employment practices, (4) success and failure of union organization drives, (5) retirement practices. He emphasized the view that publically-financed universities should devote more of their research

* Submitted by the Session Chairman, Arnold Tolles.

activities to projects which would be of service to labor and expressed the opinion that between half and three-quarters of their extension funds should be spent on worker education.

Mr. Caples, in an extension of his own prepared remarks, posed two criteria for judging the adequacy of training: (1) the placement of students in the selected field, and (2) the testimony of graduates as to whether the training proved to be helpful on the job. Respondents to his survey had reported, without exception, that their training had been too heavily biased toward labor. Most of them also thought that the professional training in this field should be at the graduate level.

Mr. Caples' own views were that a strong training in the liberal arts should be used as a base. In answer to Professor Haydanek, he observed that in his own company 25 percent of its new employees were recruited from liberal arts school graduates. Mr. Caples had formerly thought that industrial relations could be run by "generalists" alone. He now believed that specialists, such as economists, anthropologists, statisticians, psychologists, and lawyers were needed. However, an organization also needed coordinators who knew how these specialized talents could be combined. Those who had a strong liberal arts training were the ones who could best be put at the top of the structure.

Mr. Caples thought it was unrealistic to expect that a university should produce "unbiased" graduates. It was not necessary that employees should agree with existing management on everything, but, to be effective, their bias had to be generally on management's side.

Professor Windmuller (Cornell) suggested that Mr. Ruttenberg had treated university education as a bargaining proposition, substituting the university for the usual employer. He wanted a clarification of Mr. Ruttenberg's concept of the role and function of a university, whether he drew a distinction between privately- and publicly-financed universities and who, in Mr. Ruttenberg's opinion, should have a role in allocating funds.

Mr. Ruttenberg, in reply, said he wished he could influence the privately-financed universities but that he could bring pressure only on those which were publicly financed. He looked on the publically-financed institutions in the labor-relations area just as the farmers looked at the publically-financed agricultural colleges. As for fund allocation, he thought that advisory committees (such as the one at Cornell) were good. However, he would like to see persons on such committees who were concerned with the use of the products of these universities and not persons who served merely for reason of pres-

tige. As for the role of university education in this field, he did not have much use for an undergraduate program. The concentration should be on the required disciplines, leaving the practical training to be acquired on the job.

Professor Gomberg (Washington University) objected to any distinction between public and private universities. Without the subsidy of a tax allowance, private colleges couldn't exist. He was also skeptical about the kind of research proposals Mr. Ruttenberg had suggested. The AFL-CIO could finance studies of this kind if they wanted them. Most of the topics lacked real research interest. Except for a few intellectuals, the AFL-CIO organization was not really interested in research on these topics. Union officials didn't really think that an anthropologist, for example, could help them organize the South. Most of the requests of the research men in the labor organizations were only nominally supported by the union executives.

Professor McConnell (Cornell) called attention to the fundamental uncertainty of our time concerning the desirable nature of undergraduate education. In view of this uncertainty, he thought that the case against an undergraduate curriculum in industrial relations had been stated much too positively. The liberal arts program typically lacked any kind of focus. It involved much wasted time of the student and wasted resources of the faculty. A better job could be done in less time if the present undergraduate curricula were thoroughly overhauled. Indeed, a good case could be made for the proposition that the American liberal arts education tended to prolong the period of adolescence. By contrast, the students of European universities were prepared for professional careers at the time when most American students were just beginning their professional training. Even though Professor McConnell had little sympathy with the "straight-jacket" curricula in law or medicine, it had to be conceded that such schools had a clearer notion of their objectives than did most of the liberal arts colleges.

On the basis of this reasoning, Professor McConnell thought that there was much to be said in favor of experiments focusing some of the undergraduate study around the broad subject of industrial and labor relations. What was needed was not a reversion to the revered symbol of "liberal arts" but a willingness to experiment. Admittedly, experimentation would take time and it would take still more time to assess the results of various experiments. However, those universities which were engaged in industrial-relations education had an advantage, as compared with schools of law and medicine, in that their

traditions were not frozen. Professors in this field had an opportunity and a duty to experiment. This meeting would have been more useful if it had discussed more specifically, the various types of programs in the industrial relations field.

Another discussant criticized Mr. Ruttenberg's proposals on the research and extension activities of the universities, on the following grounds: (1) The universities, this discussant believed, should not give courses at a sub-collegiate level. (2) Suspicions of university programs in industrial relations were largely irrational and would not be allayed by attempts to balance a union emphasis in extension work against the alleged management emphasis of the resident work. (3) Motivation for union activity was the job of the unions and not of the universities. University research on member participation in union activities was appropriate, but it was not a function of a university to work up student enthusiasm for labor unions. In conclusion this participant expressed the belief that the foregoing discussion had provided a useful start, and that he hoped that such discussions would be continued. Perhaps future discussions, like those of the United Nations, should feature educators more prominently, in addition to representatives of labor and management.

Professor Karson (Southern Illinois) did not agree with Mr. Caples' objection to the so-called "labor bias" of university training. He believed that the universities owed as much to labor as to any other element in the community. He had found that the most significant problem of the teacher was to help the student to know himself. Students came to college classes with such pre-dispositions as hatred of John L. Lewis or of the present economic system. Professor Karson thought that a teacher's function was to help students to face such unreasoned attitudes in themselves and to then let them choose their own value system from the increased knowledge they had gained of themselves and their subject. His own students had been conditioned by a heavy anti-labor influence of T-V, newspapers, and of their own families. In such a situation, the educator ought not to give equal weight to labor and management interests, any more than one would tax equally, unequal incomes.

As a further observation, *Mr. Ruttenberg* cited a case in which the AFL-CIO had been willing to spend \$50,000 to \$75,000 on a research project on why it was that the unions had largely failed to organize the South. The interest of 12 universities had been sought, but the work was finally done by a non-university organization. The difficulties turned out to be that the AFL-CIO needed control on the

time when the material would be published, while the universities insisted on freedom to publish the findings on their own schedule in the form of a book. The AFL-CIO thought that they should be given four or five years to make decisions, based on the findings of the study. All but one of the 12 universities rejected the union's plan, and the job was eventually turned over to a commercial organization.

Professor Gomberg, in reply to Mr. Ruttenberg's remarks, expressed the opinion that both the universities and the AFL-CIO had been right. The project, as described, was one of consultation, rather than research.

Part VIII

**ROLE OF LAW IN CONTROL
OF INTERNAL UNION AFFAIRS**

THE ROLE OF LEGISLATION IN INTERNAL UNION AFFAIRS

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For nearly two years the McClellan Committee has paraded across the public stage a series of sordid spectacles of union corruption and oppression. The abuses revealed have not been petty wrongs by minor officers, but gross malpractices by high officials in such large and important unions as the Teamsters, the Carpenters, the Operating Engineers, the Bakery Workers and the Meat Cutters. There is no need to recount here the ugly details of looted union treasuries and violation of fiduciary obligations, of sweetheart agreements and exploitation of union members, of stuffed ballot boxes and rigged conventions, of dictatorial receiverships and the crushing of opposition. Although these revelations have added little to our understanding of the complex problem involved, they have produced a nearly irresistible demand for legislation.

At the last session of Congress a wide variety of proposals were made ranging from the piecemeal disclosure bill of Secretary Mitchell to the comprehensive control bill of Senator McClellan. From these grew the compromise Kennedy-Ives bill which passed the Senate only to die in the House under suspicious circumstances. The problem, however, is still alive, and the new Congress will face new proposals. The AFL-CIO executive council has declared that it will seek legislation "patterned along the lines of Kennedy-Ives" but omitting "certain unduly restrictive and unworkable sections." The McClellan Committee will make new recommendations, Secretary Mitchell will recast the administration's proposals, and Senator Goldwater will not remain silent.

There is little value now in dissecting the legislative corpses of the last session, or in speculating on the shape of things to come. Constructing a detailed blueprint might provide an intellectual diversion, but such blueprints are already available at bargain basement rates. In fact, focusing too closely on details and searching for ingenious solutions may destroy our perspective and lead to gimmickery.

The limited purpose of this paper is to articulate certain underlying considerations which may aid in evaluating legislative proposals and which may at the same time suggest certain lines of action. The purpose is not to provide a complete yardstick, but rather to emphasize certain factors which it seems to me are most often lost from view.

I. THE LIMITED GOALS OF LEGISLATION

The initial step in evaluating legislative proposals is to make more explicit the role of the law in solving social problems. This task is difficult because the role of the law is complex and its goals are inherently ambiguous. Oversimplification can produce glittering clichés and promote colorful polemics, but it can not increase our understanding of the tangled considerations and hard choices. The danger of an oversimplified view of the role of legislation is particularly acute at three points.

First, the law is an instrument for social change but it can not remake society. It has a significant but limited role, for deeply rooted institutions can not be pressed into legislatively constructed molds without doing violence to our concept of a pluralist society. The test of legislation is not whether it will eliminate all evils but whether it will take a step forward in reducing some evils. Financial reporting by unions will not eliminate misuse of funds, but it will reduce the temptation, aid the discovery of corruption, and give union members an increased ability to take self-corrective measures. The law can not make unions democratic, but by protecting the right of dissent it can make the institutional soil less barren. Limiting receiverships of local unions to one year will not eliminate all abuses, but it will reduce tyrannical use of this device.

Some evils are incapable of being reached directly without jeopardizing valuable institutions. Racketeer unions can not be outlawed without giving to government an intolerable licensing power over all unions. Sweetheart agreements can not be blocked without inquiring into the wisdom of the substantive terms of collective agreements. Such evils can be reached only by indirect measures which may help reduce their incidence. In a democracy which seeks to preserve a substantial measure of institutional and personal freedom, legislation must inevitably provide incomplete solutions. This means that appropriate proposals are inescapably subject to attack as "half-hearted," "watered down" and "failing to meet real needs." Such criticism may be clever gamesmanship or profitable politics, but it may fail to help develop constructive proposals.

Second, law making is a continuing process of adapting to changing needs. The immediate function of legislation is to meet present problems. We design legislation to reach the particular evils which loom large at the moment. When the Musicians blocked the use of recordings on radio programs, we did not attempt to construct a gen-

eral statute against featherbedding but enacted the Lea Act aimed at this specific evil. When faced with crime and corruption on the New York waterfront we limited legislation to that problem area by adopting an interstate compact and creating a Waterfront Commission. As new needs arise, new legislation can be designed to meet them.

Such pragmatism, however, cannot ignore broad principles, for the very evolutionary character of the law tends to preserve and elaborate principles which are implicitly expressed in legislation. Once enunciated they tend to have a life of their own. Therefore, immediate needs ought not lead us to lightly embrace offensive principles with the hope of repealing them when the need is gone. Thus, the non-communist affidavit, now an anachronism, has not disappeared but threatens to give birth to new offspring. One of the most serious threats to union integrity at the present is the infiltration of criminal elements. Barring those who have been convicted of a felony from holding any union office or position of trust, might help curb this infiltration, but it would at the same time give added impetus to two questionable principles. It would imply that the law should prescribe the qualifications for union office—a disquieting precedent to set loose in the law. It would also endorse the retrogressive principle that those once convicted of a crime should bear the mark of Cain and be deprived of full membership in the community. Ultimately we must make the practical judgement whether the proposed cure is worth its after-effect, whether the immediate benefits will be worth its long run risks. My main concern here is that in evaluating legislation we shall not look at one to the exclusion of the other.

The present and future needs are not always in conflict, for in meeting existing problems we may take beginning steps in establishing those basic principles which we seek for the future. For example, some of the gross abuses of trust which have been revealed can be reached by a conflict of interest statute, and at the same time the basic principle of the fiduciary obligation of union officers can be reinforced and articulated in the law. Although we cannot now explicitly define all tainted transactions, we can lay a foundation on which a more complete body of law can be built. Legislation limited to declaring certain elemental rights of union members—the right to speak, the right to vote, the right to a fair trial and the right to equal treatment—might lead courts immediately to give more adequate protection to those rights and at the same time imbed in the law for the future the seminal concept that union members have a right to a democratic union.

The third and most thorny consideration in evaluating legislation concerning internal union affairs is its acceptability to the labor movement. This is more than a political consideration, although any fair appraisal of a serious proposal must include its ability to get enacted. Acceptability is important because it drastically affects the workability of the law. Legislation enacted over the adamant opposition of all of labor would be resisted and evaded at every step, making enforcement practically impossible. It would enable corrupt union officers to make common cause with honest leaders, and would seriously weaken self-corrective measures by the labor movement itself. Beyond this, the consideration of acceptability is essential in a government based on consent. Conformity is not coerced on major social groups, but compromises are sought which will gain acquiescence or cooperation. Thus the law gains respect and the cohesiveness of society is preserved.

The search for acceptable compromises presents serious difficulties, for it requires flexibility of both sides. So long as the labor movement stubbornly resisted any significant legislation, with George Meany denouncing Senator Kennedy's proposals with "God save us from our friends" and A. J. Hayes terming those who presented such proposals as "Peronists," compromise was impossible. Fortunately, labor has now ceased to plead for divine intervention and willingly accepts help from imperfect mortals to save it from its enemies. Rational discussion and the development of acceptable solutions may now be possible. However, this still involves compromises which often lead to oddities. The curious provision in Kennedy-Ives placing a halo around ethical practices codes has no logical place in the law, but it may have helped sweeten a bitter pill. Requiring employer-reporting need not be justified entirely on independent grounds, for it serves a valuable purpose by softening the reaction of labor that it is being singled out for punitive action.

Acceptability is, of course, not an absolute, for intransigent groups cannot be allowed to hold society in ransom. Compromise must stop short of dissolving central purposes or undermining the effectiveness of legislation. The limits need not be defined here. My limited purpose is to emphasize that in a democratic society one of the legitimate considerations in evaluating legislation is whether it is acceptable to those whose conduct is to be controlled.

Law making in a democracy is inherently disorderly, particularly when the law attempts to deal with large and intricate social problems such as internal union affairs. Legislation inevitably provides only incomplete solutions; it must constantly improvise to meet immediate

needs and yet adhere to durable principles; and it must accept compromises to gain the consent of those controlled. Legislation can be neither designed nor judged by deductions from broad premises or standards of symmetry, for this would confine living law within the straitjacket of logic. The test of law is not its tidiness but its contribution to social progress.

II. THE ROLE OF LEGISLATION AND UNION SELF-REGULATION

The limited role of the law grows out of our concept of limited government and our reliance on other instruments of social control. We distrust concentrated power in the hands of government and seek to distribute control by encouraging and maintaining center of power in private institutions. So far as possible we seek to make these institutions self-regulating.

This basic concept of pluralism has special significance in developing legislation concerning internal union affairs. So far as possible, the labor movement should be allowed to clean its own house. The Codes of Ethical Practices have made articulate the conscience of the labor movement, and the expulsion of corrupt unions has demonstrated a courageous determination to match words with action. However, in spite of such responsible and resolute action, the labor movement is at present unequal to the task.

These self-corrective measures fall short in three respects. First, a large segment of organized labor is beyond the reach of the AFL-CIO and answers to no conscience but its own. These unions already include those which are most corrupt or dictatorial or both, such as the Teamsters, the Longshoremens, and the Mine Workers, and may soon include the Carpenters. Second, the sole sanction for enforcing the codes is expulsion. Amputation neither cures the diseased member nor strengthens the main body of the labor movement. The very severity of the remedy reduces its effectiveness in reaching small scale violations at the local level. Third, the code on democratic processes is inadequate to protect the basic rights of union members. The Steelworkers convention while citing the code provision that "the right to criticize the personalities of his union officers does not include the right to undermine the union," without hearing any evidence, declared the leaders of the Dues Protest Committee guilty of slandering union officers, undermining the union and a series of other offenses, ordered them tried by their local unions and eliminated.

These weaknesses in union self-regulation ought not lead us to

abandon this avenue of control as wholly worthless. Rather it challenges us to find ways in which the law can aid and strengthen the process of self-regulation and encourage its continued development. The problem is not to choose between self-regulation and legal intervention but to find ways of making them mutually intersupporting.

One helpful step which the law can take in this direction is to create an instrument for discovering specific instances of wrongdoing. President Meany over a year ago said: "Until the Senate Hearings we did not know one one-hundredth of the corruption existing in the union movement," and the McClellan Committee now says it has enough complaints to keep it busy for twenty years! Unions have no subpoena power nor trained investigators. Leaders are reluctant to initiate investigations of fellow-leaders or supporters within the union, and suspicions are discounted in the hopes of avoiding uncovering of scandals.

Disclosure of corruption and dictatorial practices have already contributed to self-correction. When the McClellan Committee revealed the machinations of Max Block, vice-president of the Meatcutters, in making sweetheart agreements and misusing union funds, he was removed from office. When the officers of Local 394 and 450 of the Hotel and Restaurant Employees in Chicago were shown to be engaged in shakedown organizing, the international promptly suspended them and put the local in receivership. Disclosure, of course, cannot cure corruption at the very centers of power in rhinoceros-skinned unions such as the Teamsters. In most unions, however, the mere threat of public disclosure will lead to action.

A congressional committee with one eye on the public press and the other on political profits, while stumbling toward shotgun legislation, is scarcely suitable for this task. It breeds distrust and alienates those who must bear the burden of self-correction. The task requires a permanent body, politically insulated, which seeks to discover evils and get them eliminated rather than to stage sensations and manufacture headlines. The very presence of such a body will keep a continued pressure on unions not to relax and will reinforce those in the labor movement who insist on high standards of honesty and democratic procedures.

Recognition of union self-regulation suggests that in choosing the substantive rules to be enacted into law, we should be guided by those rules prescribed by the labor movement. The entire Codes of Ethical Practices should, of course, not be blanketed into a statute, but these Codes do contain rules which the major portion of the labor move-

ment has declared appropriate and by which they are willing to be bound. Statutes incorporating rules drawn from the Codes would enforce no obligations beyond those already morally if not legally binding on the majority of unions by their own acceptance.

Regardless of the substantive rules to be enforced, legal intervention should always be the last resort. Administration of any statute should rely primarily on negotiation and self-correction from within the labor movement and not vindictive prosecution and trigger-happy litigation. Formal proceedings should be used in a case only when all else has failed. Thus unions are not only given the opportunity but are presented with the responsibility to solve their own problems.

Individual members who feel they have been wronged should be required to seek internal remedies before rushing into court. In some states, such as New York, the rule requiring exhaustion of union appeals has been so eroded by exceptions that unions are frequently deprived of any opportunity to correct their own errors. These exceptions are rooted in the interminable and fruitless characters of too many union appeals, and the need to give the individual more immediate protection. The central value of the rule can be saved by requiring exhaustion of appeals available within a limited period, such as six months, and providing interim protection of the individual's rights while he is appealing within the union. Where unions have established public review boards, such as those done in the Auto Workers, the time limit may need to be lengthened to encourage use of this self-correction device.

The most crucial step in making unions responsible centers of power and strengthening their own internal processes of self-control is protection of democratic rights within the union. The right of union members to protest against union policies encourages change from within. The right to accuse officers of dishonesty, breaches of trust and dictatorial methods helps deter such abuses. The right to form opposition groups within the unions, campaign for office, and have honest elections increases the ability of unions themselves to oust tyrannical and predatory leaders. Democracy does not insure purity, for union members may tolerate abuses and elect scoundrels, but guaranteeing these basic rights will substantially reduce the need for extensive intervention in union affairs. Legal protection of these rights thus helps limit governmental control and thereby preserves and promotes pluralism.

Furthermore, protection of democratic rights increases the value of other measures aiding self-regulation. Disclosures of wrongdoing

gain potency when democratic processes make possible the elimination of union officers. The union's own rules gain validity when democratically adopted, and the union's internal appeals gain reliability if they are subject to democratic checks. Most important, relying on democratic processes within the union keeps the primary responsibility focused where it belongs—on the union itself.

III. THE ROLE OF STATE AND FEDERAL LEGISLATION

The problem of allocating and coordinating the control functions of the union and the law has its counterpart in allocating functions between state and federal governments. This problem, unfortunately is seldom squarely faced, for the choice between state or federal legislation is commonly based on political considerations and the happenstance of political control at the moment.

The choice, however, involves two basic values of federalism which ought not be overlooked. First, federalism is based on the principle of reducing the dangers of governmental power by keeping it widely distributed. The states serve as centers of power to prevent its concentration in the national government which might become uncontrollable and a threat to freedom. As the power and function of government grow, the need to keep them distributed becomes increasingly great. Although the labor movement now prefers federal legislation, it might well give second thought to the dangerous consequences if the concentrated power of the federal agency fell into unfriendly hands.

The second basic value of federalism is that it permits states to serve as laboratories to experiment in solving difficult social problems. Regulations of internal union affairs is precisely the kind of a problem which requires experimentation. Unions are highly complex institutions and the abuses which are sought to be eliminated have deep and intricately intertwined roots. The law might seek to reach these at diverse points and with widely varied remedies, but no one can foretell the effectiveness of various legal measures nor foresee the chains of reaction which they may begin. Multiform state legislation could test various proposals, provide experiences to guide us in evolving sound solutions, and limit the impact of our miscalculations. A mistaken remedy at the federal level could have drastic repercussions on the whole labor movement.

These values are, of course, not absolute but are qualified by compelling national needs. However, these needs should be real and not imaginary—that is, the problems involved should be peculiarly sus-

ceptible to national and not state solution. Thus, it is argued that internal union problems are national in scope, but so are divorce, juvenile delinquency and traffic accidents. Similarly, it is argued that because unions operate in many states uniformity is required, but large corporations likewise operate in many states and yet are made amenable to state laws governing their internal affairs.

There is a compelling need that parties not be subject to independent and possibly conflicting legal rules, but this is seldom a problem in regulating internal union affairs. Disputes over admission or expulsion from a union are governed by the law of the state where the local union is located. Likewise, the regulation of local union elections, removal of local officers, and receivership of local unions are governed by the state of the local, and regulation of the international union elections can be governed by the state in which its headquarters are located. Thus, one and only one legal rule controls each situation. It is possible, of course, to conjure up problems which might cause the courts difficulty in determining which state's law controlled. The short answer is that state courts have been deciding these cases for fifty years, and there are hundreds of reported decisions without a ripple of a problem in this respect. If increased state regulation should create difficulties by subjecting unions to conflicting rules, federal legislation can then resolve the conflict. It is as yet an imaginary, not a real problem.

There is no compelling national need which overrides the basic value of federalism and justifies preferring federal as distinguished from state legislation. The arguments presented but thinly veil the fact that preference for federal action is not based on principle but primarily on considerations which vary from simple buck-passing to confidence in the superior wisdom of Congress, although provisions in Kennedy-Ives such as barring all persons convicted of a crime from holding union office must have created some doubts as to that superior wisdom.

The compulsive urge for national uniformity creates hidden dangers of creating a new "no man's land." State courts have already developed a substantial body of case law concerning internal affairs of unions. The courts through this body of law now give at least some degree of protection to the rights of union members and the democratic process within unions. Federal legislation might wipe out these protections and provide no adequate substitute.

Title III of the Kennedy-Ives bill, for example, sought to regulate union elections, but the sole remedy provided was to void the

election and hold a new one if it was found that violation of the section may have affected its outcome. This remedy could not be invoked until months after the election, and in the meantime the wrongfully elected officers would continue in control. It then provided that "the duties imposed and the rights and remedies provided in this title shall be exclusive," thereby explicitly destroying existing remedies in state courts.

The primary legal protection now given by state courts against improper elections comes before and not after the election. If the nominating procedures are abused, campaigning improperly conducted, candidates wrongfully disqualified, or members classified as ineligible to vote, legal action can be brought and corrections compelled before the election is held. This is the point at which legal protection is most commonly sought and is most effective. Kennedy-Ives would have destroyed all these pre-election remedies and have left a serious gap in the law. Because it created no effective substitute, it might well have weakened, rather than strengthened legal protection of the election process.

If legislation is enacted at the federal level, it need not preclude state action, but can leave room for coordinate state regulation. For example, Title II of Kennedy-Ives, which sought to curb arbitrary and long continued trusteeships imposed on local unions, explicitly preserved state remedies by allowing legal actions in state courts until proceedings under the federal law were brought in the federal courts. A similar provision in the Title III governing elections would have avoided the danger of creating a new kind of "no-man's land" and have insured maximum legal protection of the election process.

Coordinating federal and state laws requiring filing of financial statements presents special but not especially difficult problems. The form of the financial statements required tends to dictate the way records are kept, and unions ought not be compelled to meet varying demands. Therefore, the states need to be limited to requiring the same information as the federal government. However, a state ought to have concurrent power to enforce this requirement as to unions within its jurisdiction. The state has an interest and can more appropriately and effectively reach local mishandling of union funds. False filing or falsification of the books can be made a violation of both federal and state law. Double prosecution for the same offense can be prevented by a provision in the federal statute.

These are but examples intended to suggest that with moderate ingenuity we can find ways to preserve some of the values of federalism even though political or other considerations lead to national legislation. The need in a democracy to keep powers widely distributed and the need in this area for experimentation demand that states not timidly abandon nor Congress brashly preempt control over this field.

IV. THE ROLE OF COURTS AND ADMINISTRATIVE AGENCIES

Regardless of whether regulation is state or federal, the final question remains, who shall enforce it. This problem is usually presented as a simple choice between courts and administrative agencies. However, the answer must depend in part on what is regulated. Enforcing financial reporting requirements is the work of an administrative officer, recovery of diverted union funds falls within the normal functions of the courts, while protecting membership rights and election processes is readily susceptible to either administrative or judicial control.

Although generalizations are dangerous, some rough analysis of the points of strength and weakness of courts as compared with administrative agencies may be helpful. On some points they are approximately equal. Speed in deciding cases and giving relief is equally absent in both. Courts are slow, but agencies like the NLRB are even slower. Courts are reluctant to give immediate relief by granting temporary injunctions pending trial, but the NLRB, for instance, shuns even asking for such relief. Flexibility in devising remedies to meet special needs is likewise about equal. Administrative agencies may be given power to order "such affirmative action as will effectuate the purposes of the Act," but with bureaucratic caution they timidly invoke only rote remedies. Equity courts have wide freedom in fashioning remedies, and though their creativeness is scarcely inspiring, they can and do compel union officers to disgorge illegal profits, order union members admitted reinstated, hold elections and even appoint receivers for unions.

At some points an administrative agency has marked advantages. First, it can eliminate cost of litigation as an obstacle to enforcement of legal rights. In internal union cases, investigation costs, legal fees, and the printing of a record and briefs, even in relatively simple cases, amount to several thousand dollars. Judicial protection is barred to the individual union member and his rights are lost by default. An administrative agency, however, bears all

of these costs and acts as public vindicator of the individual's rights.

Second, an administrative agency is more adaptable than a court in aiding settlement by negotiation, and many agencies such as the state commissions against discrimination have been highly effective in working out problems informally. Internal union disputes often have the quality of family fights and may be better resolved by conciliation than by litigation. An agency, with its active continuing role and its informal procedures has a unique opportunity to act as mediator, and the process of mediation is the heart of encouraging union self-correction.

Third, an administrative agency can gain a better understanding of the problems underlying each case and thereby find a more adequate solution. In part, this is a matter of expertise, but it is more. In litigation the plaintiff asserts a certain right and seeks a certain remedy. The whole procedure tends to narrow the focus to that precise issue. However, these cases are seldom that simple. Expulsion for claimed violation of a work rule may be but an incident in a bitter factional feud. Receiverships imposed on locals nominally for unauthorized strikes may be rooted in claimed infiltration of communists in the local or claimed sweetheart agreements by the international. The administrative process, because of its investigative function and its informal procedures, is better able to see the problem whole and to design a remedy to reach its roots.

These advantages are not unqualified, for the administrative agency is not a legal penicillin to be prescribed as a cure-all. One weakness is its lack of accessibility. The agency's office may be far from the scene of the dispute, while the local court is near at hand. This is accentuated if control is federal, for regional offices will be widely scattered and ultimate resort is to the remote labrynth of Washington.

The most dangerous weakness of an administrative agency is its tendency to bend before the pressure of persuasion by those regulated. There need be no venality or political influence. Day by day the agency is bombarded by arguments and enticed by rationalizations until its sense of purpose becomes blurred and its resoluteness softened. An agency such as the NLRB which is subject to opposing pressures from relatively equal interest groups, labor and management, may be able to maintain independence of thought and objectivity. However, no such countervailing power is present in internal union disputes. These disputes are rooted in the conflict

between freedom and authority, minority rights and majority rule, democratic disruptions and enforced order, local independence and centralized control. The continued organized pressure will come almost exclusively from the incumbents who speak for orderly, responsible, centralized authority. The agency, subject to this one way pressure, may gradually lose its zeal to protect democratic rights and ultimately tend to confirm bureaucratic control.

Courts are not wholly immune to pressures but they gain substantial protection from the fact that internal union cases are but a minute fraction of their work. Judges are not subject to the subtle brain-washing of continued persuasive pressure, and there is not the opportunity for informal contact which reduces resistance. Judges are not without social bias, but pro-union or anti-union feelings do not seem to color judgment in these cases involving internal disputes.

Courts and administrative agencies each have their strengths and weaknesses. However, we are not necessarily compelled to choose but might devise unusual but useful combinations of both. For example, proposed legislation in New York allows union members to sue in the courts for an officer's violation of his fiduciary obligation, and to be awarded legal fees out of any funds recovered. It also permits the individual to file a complaint with an administrative agency which then can make an investigation, hold a hearing and publish findings. The members of the union can still sue, but if no such suit is brought the agency can bring a suit on their behalf. The problem of costs of litigation is reduced, an avenue for negotiation is available, a procedure for disclosure is provided, and if the agency atrophies, protection in the courts is still available. Such hybrid procedures may not fit our stereotypes but the test is not esthetics but effectiveness, and they might serve to combine the strengths of both judicial and administrative remedies.

V. CONCLUSION

The now tedious melodrama of the McClellan Committee, with its ever-growing cast of villains, has portrayed internal union affairs in the simple terms of a western novel in an industrial setting. The problem is only to separate the good men from the bad and drive the badmen off of the range. The graphic force of this portrayal has produced simplified solutions with less than frontier

justice, such as barring those convicted of a crime from holding union office with the naive belief that this will eliminate the outlaws.

Unfortunately, the problem is not that simple. The line between proper and improper conduct is not easy to define, and democracy shades from bureaucratic centralism to benevolent despotism. Evil men are not easily identified, nor can they be readily banished. Legislation concerning internal union affairs reaches into the very center of complex social, political and economic institutions, and unions themselves vary in functions, traditions and structures. The problem of designing legislation is inescapably complex, and constructive solutions are not likely to be found in magic formulae.

The very nature of the law as well as the character of the problem makes it almost inevitable that any legislation must be imperfect and incomplete. The law cannot eliminate all corruption and undemocratic practices in unions, it can only take steps forward which will help solve present problems. Those steps are slowed and shortened by the need to gain the willingness of labor movement itself to accept the legal controls. The goals of legislation must, therefore, be limited—we cannot reach heaven in a single bound. These limitations and imperfections, however, do not prove all effort folly. Constructive steps, though small, can be taken to help fill immediate needs and also to plant and nourish in the law the seeds of those principles from which a more adequate body of law can grow.

Running through the whole problem of designing or evaluating specific proposals is the pervasive consideration of determining the relative roles to be played by the unions and by the law, by the states and by the federal government, by the courts and by administrative agencies. The assignment of roles is fundamental for it touches the very heart of our democratic structure. The values at stake are the promotion of a vital and responsible pluralism and the perservation of the federal system. Our recognition of those values and our adherence to them will affect if not control the specific steps to be taken.

These values, however, are not absolutes and we cannot simply choose between polar alternatives. The solution must inevitably be a mixture of piecemeal combinations. Our central problem is, so far as possible, to discover and develop ways in which the roles can be intersupporting. Legislation should not exclude or negate union self-regulation, but rather aid and encourage it. Federal legislation should not preclude or destroy state law but rather

preserve and coordinate it. Administrative remedies can be designed to supplement judicial remedies and not oust courts from giving protection to individual rights.

Legislation conceived in this framework may lack neatness and logical symmetry. It may look like patchwork without pattern or form. Our task, however, is to find ways in which the law can contribute to the solution of a complex social problem and also preserve the maximum of democratic values.

DISCUSSION

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I

At the outset, I want to thank Professor Summers for going beyond the strict confines of his assigned topic—The Role of Legislation in Internal Union Affairs—and for discussing the interrelated functions of legislatures, both state and federal, of courts, of administrative agencies, and of unions themselves in the social control of labor organizations. For the obvious reasons mentioned in his paper, there is a present tendency to emphasize, almost to the exclusion of everything else, the role of legislation, especially federal legislation, in eliminating various malpractices in the administration of internal union affairs. Professor Summers has avoided both this error and the equally serious one of opposing all external controls of union procedures; instead, he has outlined a humane, viable approach to the problem that is entirely in keeping with the principles of our pluralistic society.

Since I find no serious flaw in the fabric of his discourse, about all I can usefully do on this occasion is to crochet a little around the edges; and inasmuch as the principal focus of today's discussion is legislation, I shall concentrate on the Kennedy-Ives bill and its likely progeny.

II

When Professor Summers referred to the Kennedy-Ives bill as dying in the House of Representatives "under suspicious circumstances," I assume he was employing a euphemism. A coroner's jury would have had little difficulty in reaching a verdict of death by assassination at the hands of a few employers' associations. That act of legislative homicide uncovered the fallacy in the assumption that any proposed federal statute dealing with the regulation of union internal affairs, in order to be acceptable to organized labor, must incorporate ameliorative Taft-Hartley amendments demanded by the unions. Such amendments are not only irrelevant to the basic purposes of the proposed legislation; they also set the tribal drums beating in the camps of organized management and give rise to renewed demands by employers for restrictive amendments to Taft-Hartley implacably opposed by unions.

The fate of the Kennedy-Ives bill suggests that the estimated price put on its acceptability to unions was too high. I do not mean to imply that acceptability is not essential; but I do submit that the new law must be acceptable in terms of its own objectives and provisions, without the lagniappe of Taft-Hartley amendments not germane to its basic purposes. By including the latter in the Kennedy-Ives bill, its proponents bought off union opposition but incurred the bitter enmity of employer groups; so in the end the maneuver proved to be a fruitless one.

On the other hand, there is one provision lacking in the Kennedy-Ives bill, which seems to me indispensable to any law designed to strengthen democracy within unions. Some years ago, as a result of my own studies in this field, I came to the firm conclusion, to which I still adhere, that it is futile to seek the eradication of undemocratic policies and procedures within unions without first removing all unjustifiable barriers to union membership. Neither the Railway Labor Act nor the Taft-Hartley Act have removed those barriers; they still exist. While organized labor is working gradually to eliminate racial and color bars from union constitutions and rituals, it needs the support of government policy and sanctions. The present state of the law in this country is that a union may lawfully refuse to admit into membership workers in the bargaining unit that it represents, even if that refusal is based on what the United States Supreme Court has termed the "irrelevant and invidious" criteria of race or color. It is true that the union may not procure the discharge of such persons under union security provisions if they are otherwise qualified for membership and are willing to join on terms and conditions available to others; but the fact remains that the denial of membership constitutes a deprivation of the right to participate in important decisions affecting the welfare of all employees in the bargaining unit. Government cannot very well insist on democracy within unions if it will not guarantee this fundamental right of participation in union affairs by employees who are qualified and willing to join.

Any law applicable to union internal affairs that is proposed or adopted, therefore, should include a provision making it an unfair labor practice for a union which denies admission to Negroes or other minority groups to purport to act as exclusive bargaining representative; it should also include the correlative provision making it an unfair labor practice for an employer to recognize or deal with such a union as exclusive bargaining representative.

I am quite aware that inclusion of these provisions would arouse the resistance in and out of Congress of those groups generally opposed to equal treatment of the Negro and of other minority groups. This opposition would of course greatly endanger the chances of the bill's passage. Still, we must take a stand somewhere. If the American people will not support a law guaranteeing to persons represented by a labor organization the right of equal membership, which is the first and indispensable condition for democratic participation, then all this talk of the need for legislating democracy within unions is merely an exercise in mass hypocrisy.

ROBBEN W. FLEMING
University of Illinois

Whether or not one completely agrees with Prof. Summers it must be clear to all that his paper represents a careful analysis of the problem involved. For that reason, I think no useful purpose would be served in suggesting a slightly different emphasis on some of the things he has said. It may, however, stimulate discussion to suggest that he takes an unnecessarily dim view of one approach to the problem, and that a reasonable argument can, in fact, be made for it. I refer to that portion of his paper in which he says: "Racketeer unions can not be outlawed without giving to government an intolerable licensing power over all unions."

Let me be the devil's advocate by suggesting that this statement calls for closer analysis. I shall do so by advancing a proposal which needs, however, to be prefaced by a statement of three basic propositions, and an analogy.

The three basic propositions are these:

1. It is very easy to overestimate the effect which the passage of a law will have. As a matter of fact, some of the worst offenses disclosed by the McClellan Committee, were violations of already existing law. It follows that the mere passage of legislation will not resolve the problem.
2. The consent of the governed is critical to the success of this kind of legislation. If it is imposed on a hostile or unwilling labor movement the net result is almost certain failure.
3. If we believe what we all say about the courageous attitude

of the AFL-CIO in facing up to this problem by passing the ethical conduct codes, and if we look at the unions against which the major part of the attention has been focussed, it follows that the principal problem is in finding some way to reach unions which are outside the AFL-CIO framework.

Now let me state the analogy. In the State of Wisconsin a man who wishes to be admitted to the practice of the law may gain admission in either of two ways: (1) By being a resident of the State of Wisconsin and attending any law school in the state "which law school was at the time of his graduation approved by the Council of Legal Education and Admission to the bar of the American Bar Association . . . ," [West's Wisconsin Statutes Annotated, 256.28(1)]; or taking the bar examination. Note that under this system a wholly private agency, the Council of Legal Education and Admission to the bar of the American Bar Association, is empowered to approve standards under which a lawyer will be admitted to the practice of law in the State of Wisconsin.

Keeping in mind the three basic propositions suggested earlier, and the analogy set forth above, suppose Congress enacted the following legislation:

1. All unions within the reach of the commerce power would be required to have a federal charter.
2. The federal charter could be obtained in either of two ways:
 - a. By simply presenting evidence of good standing in the AFL-CIO, or
 - b. by complying with federal standards which would be drawn from the ethical standards codes of the AFL-CIO, particularly those dealing with financial responsibility, conflict of interest, and democratic processes.

Would this, as Prof. Summers suggests, give the federal government an intolerable licensing power over all unions? In this connection it is well to remember that Mr. Justice Brandeis, who surely qualifies as a friend of labor, repeatedly argued that unions should be incorporated. It is true that he had in mind the problem of suability and that this has now been resolved by provisions of the Taft-Hartley Act. But the general principle is the same.

Most of us, I suspect, agree that unions are tinged with a public interest. If it is so, is it any worse for the government to charter unions than to insist that a prospective lawyer or doctor

fulfill certain standards of admission, that a radio station comply with FCC regulations, that a restaurant obtain a public health certificate before operating, or that a charitable trust obtain approval of the Internal Revenue Bureau before attaining tax free status?

To put the argument another way: If we really want self-regulation is there any difference between automatically chartering all unions which comply with a standard set by a private organization, namely, the AFL-CIO, and automatically admitting to the bar in the state of Wisconsin all students who graduate from a Wisconsin school which is approved by the American Bar Association? Granted that all organizations should not be forced into the AFL-CIO, is there any reason why other unions should not comply with the same general standards enacted into law, particularly when some of the worst offenders have already been ousted by the parent body for failure to comply and are then beyond the reach of that organization?

Obviously, this sketchy proposal ignores or fails to specify the way in which many problems which you will think of should be handled. Some of these problems could be met. Others, perhaps, could not. I advance the proposal not as an answer to this difficult and complex problem, but to encourage you to think through the question of some kind of governmental approval for unions.

P. L. SIEMILLER

International Association of Machinists

My comments on *one* statement in Professor Summers' paper will epitomize my comments on the whole subject of "The Role of Legislation in Internal Union Affairs."

Professor Summers stated, "So long as the labor movement stubbornly resisted any significant legislation, with George Meany denouncing Senator Kennedy's proposals with 'God save us from our friends' and A. J. Hayes terming those who presented such proposals as 'Peronists,' compromise was impossible."

Since A. J. Hayes is the International President of the Machinists' Union, the union which I am privileged to serve as General Vice President, it is only natural that I take note of the use of Mr. Hayes' name. More than that, I feel it is imperative that I comment.

I remember what Mr. Hayes had said. I think it important to the subject under discussion here to set the record straight regarding just what he did say.

The reference to Peron was made on April 19, 1958, in New York City when Mr. Hayes addressed a meeting of the League for Industrial Democracy. I should mention that the occasion was for the purpose of presenting to Mr. Hayes the League's 1958 award for service to democracy, said service being directly connected with his work as Chairman of the AFL-CIO Ethical Practices' Committee. Mr. Hayes' remarks were made in response to this presentation.

The subject of his remarks was democracy. He said, "Democracy in the American labor movement is in dire jeopardy; and the threat is not from within, but from without."

Mr. Hayes insisted, as I insist now, that "the American labor movement has always been democratic in nature. Democracy is inherent in both the American labor movement and in American workers."

"It is true," Mr. Hayes said, "that the democratic process has been compromised—yes, even abandoned on some occasions—in isolated segments of the trade union movement, just as it has been compromised and temporarily abandoned in other phases of life. But these have been transient and isolated developments in a continuing history of democracy."

Mr. Hayes cited, as I also cite now, that the merged American Federation of Labor and Congress of Industrial Organizations has given ample proof during its relatively brief existence of its determination to enforce the democratic process as a fundamental part of the ground rules for its affiliates.

In the sequence of his remarks, Mr. Hayes then said that there are those in this country who consider themselves friends of organized labor who through lack of information and understanding of the American labor movement "constitute the external threat to democracy in the labor movement."

Now I am getting right to the words used by Mr. Hayes—words which were twisted by the press to indicate that he had compared Senator Kennedy with Peron. Furthermore, the bill to which Mr. Hayes referred in that speech last April should not be confused with the one later introduced by Senators Kennedy and Ives; the former bill was introduced earlier and was subsequently withdrawn by Senator Kennedy.

Now then, speaking of certain would-be friends of labor, this

is what Mr. Hayes actually said: "In their no-doubt well intentioned, but certainly misdirected, enthusiasm to guard the members of the labor movement from their own weaknesses, they are developing a pattern of government controls and governmental interference with the internal workings of unions, which could very well spell the doom of labor as a free institution in America.

"In this regard, I ran across a quotation the other day which seems to me to symbolize their attitude. It reads as follows:

"We have stated that the formation of trade unions will be free and we shall protect that freedom; but we believe it to be our duty to advise the workers as to the way in which they will prove more efficient in their struggle to defend their own interests.'"

Mr. Hayes continued, "I think you will agree with me that this is a rather mild expression of the attitudes embraced by many self-labelled friends of labor, in and out of government, since many of them would extend more than simple advice.

"Surely, without stretching the imagination, that statement might have been made by one of the several so-called liberal members of the McClellan Committee, or, for that matter, by any one of the eminent professors who helped draft the so-called Kennedy bill. It was not, however.

"That statement was made on July 20, 1944, by one Juan Peron. It sums up in honeyed words, the attitude of the 'benevolent' but tyrannical state toward the labor movement: You are free to seek your own best interests, but I will tell you what your best interests are, and how you may best achieve them.

"The tragic part of the situation, from the viewpoint of us in the labor movement, is that it implies a belief, on the part of many persons who really do have the right to consider themselves as our friends on the basis of past performance, that we in the labor movement are utterly incompetent of running our own affairs."

Such was the background and the context of Mr. Hayes' reference to Peron. He did not call anybody "Peronists."

Professor Summers, in another statement in his paper, said, "Law-making in a democracy is inherently disorderly, particularly when the law attempts to deal with large and intricate social problems such as internal union affairs."

I do not agree that internal union affairs are a large and intricate social problem—nor do I agree that the spectacular and extensive publicity given to the McClellan Committee hearings has yet created a large and intricate social problem of internal union affairs.

The unions which have been involved in those hearings are not normal or typical or representative of the American labor movement.

But I will agree, I will admit my fear that such a matter as internal union affairs will become larger and larger, more and more intricate and more and more of a social problem, the more you try to legislate—the more you try to legislate detailed procedures to regulate and control the internal affairs of unions.

True friends of labor will not complicate labor's effort to develop standards of practice, now so well-started in the Ethical Practices' Committee, which are intended to serve not only the well-being of its own members, but the greater good of our nation.

Part IX

REPORTS

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION

EXECUTIVE BOARD MEETING

Friday, May 2, 1958, Saint Louis, Missouri

The Executive Board of the Industrial Relations Research Association met on Friday, May 2, at 12 noon at the Statler Hotel in St. Louis. Present were: President E. Wight Bakke, Board Members Daniel Bell, Otis Brubaker, Harry Douty, Murray Edelman, Robben Fleming, Leo Teplow, Dale Yoder; Edwin Young, Secretary-Treasurer; George England, Chairman of the Publications Committee; and George Seltzer, Chairman of the Program Committee for the Spring Meeting.

The first item of business was the report of the Publications Committee. The Chairman, Mr. England, stated that the choice boiled down to alternatives (a) and (d) of the questionnaire on which the membership was polled. It was clear, he said, that the membership did not favor raising the annual dues.

The President called for Board opinion on alternatives to the two mentioned in the report. In a lengthy discussion of alternatives, the following points were brought out: The "exploring" function of the committee included exploring the possibility of some university publishing the proposed journal, the problem of costs, and that of securing an editor. The establishment of a journal in the field of labor history is being considered. A possible alternative outlet for industrial relations research would be a broadened monthly BLS journal. On this topic, Mr. Douty said that the Bureau itself was not producing enough to fill the Journal, and that there was some difficulty in getting suitable materials. Mr. Teplow stated that many people were not aware that the Journal was looking for material. Mr. Douty said that the extent to which the Journal would present a solution to the outlet problem would be limited. Mr. Teplow pointed out that the criteria for publication in other journals necessarily differ from those for a journal edited by the Association itself. Mr. Bell pointed out the difficulty of knowing what the real need is, and that a journal once started must be kept up. He suggested an alternative proposal; namely, that there be an inventory of research which would indicate whether enough is going on for a supply of articles to publish. It was recalled that the Directory of Current Research published in 1957

under Mr. Yoder's direction at the Minnesota Industrial Relations Center for IRRA had provided such an inventory. Several complimentary remarks about the Directory were made by Board members.

The possibility of getting a university to underwrite an Association journal was discussed. It was suggested that the Association should consider carefully what university ought to publish, not just choose from volunteers. A comparison with other journals as to costs, subsidization, etc., was proposed. Mr. Fleming thought the cost consideration was paramount, and that the choice should be put to the membership first on the basis of cost. If the vote was in favor of four issues of a journal, then the editorship, sponsorship, etc., could be considered. If the vote was opposed, then there would be no need for further probing.

It was suggested that the committee consider the possibility of a smaller publication, perhaps a mimeographed quarterly, with one piece of research only reported each time. One member thought this was an entirely different proposition from an alternative to a journal or the present publications.

The question arose as to whether the Proceedings of the Annual Meeting would continue to be published. The Secretary-Treasurer pointed out that this would take up about two of the journals in cost and length.

Examples were mentioned of several journals now being published at universities, such as the Southern Economic Journal, the Western Political Science Quarterly, the Journal of Land Economics.

The President asked if it would be possible to include in the survey a question: "Have you had material which you want published and could not find an outlet for—give specific instances?" Mr. Douty commented that in a sense this had been done by the BLS, with a very poor showing in the material that came in. Mr. Teplow pointed out that the two annual meetings contained a nucleus of material, and that there was much research going on in universities that could be tapped.

It was suggested that since one reason for more frequent publication is to keep the membership in touch during the year, a newsletter might satisfy this need. A contributed rather than invited basis for the special volume was suggested. A sampling of perhaps 100 members, instead of a complete membership poll, was suggested, for the survey.

The President asked Mr. Fleming to bring samples of newsletters to the next Board meeting. He then called for a decision on asking

the committee to circularize the members on the choice of alternatives and whether the Board would meet between now and December. He asked what time would be convenient for all, suggested September. He raised the question of payment of expenses. The Secretary-Treasurer said the cost would be about \$1500. It was suggested and agreed that the Board meet a day early, before the December meetings. It was also agreed that the President and Secretary-Treasurer meet with the publications committee in the fall.

The President read the nominating committee's report (Neil Chamberlain, chairman). The report was accepted, as follows: For President, William Haber. For Executive Board: Milton Derber and Frank de Vyver; Ross Stagner and Alvin Gouldner; Herman Somers and Clyde Summers; Ronald Haughton and Gabriel Alexander.

The President presented his report on the program for the December meeting. He expressed his gratitude to members of the Executive Board for their replies to his request for comments on his program outline. He reported that all chairmen for the sessions except one had been selected.

Future meeting plans were outlined as follows: Spring Meeting 1959—Boston. Annual Meeting 1959 in August with the Sociologists in the Midwest or in December with the AEA in Washington. Spring Meeting 1960 undetermined. Annual Meeting 1960 in December with the AEA in New Orleans, or wherever the AEA was scheduled to meet.

There was some discussion concerning the time of the Boston meeting, April or May or earlier. It was agreed to find out what the Boston people want.

Next item on the agenda was the New York Chapter's proposal for a theme contest. Mr. Teplow explained the New York Chapter's idea of inviting students to send in a theme on an industrial relations subject, the winner receiving a \$100 Savings Bond. The award is made at the annual chapter meeting in May. Upon inquiry it was found that the Foundations might be interested if the project were a national one, but not if it were local or regional. At the Chapter's request, Mr. Teplow recommended to the Executive Board that this be made a project of the national IRRA. It could be sponsored either by some local chapter or by the national organization. The New York Chapter had about fifteen themes submitted. The winning theme was published in the *Labor Law Journal*. While the kind of research at the undergraduate level is not original research, the project is designed to establish interest in the area, to make students aware of IRRA, to

make universities conscious of the existence of IRRA. First, second, and third prizes could be offered. The President agreed to send a letter to local chapters to sound out interest in the project. Mr. Edelman proposed that the contest be limited to undergraduate students.

Appointment of an Editor for the Proceedings was discussed. It was left to the President to make the appointment, with many names being suggested. The President appointed Gerald G. Somers.

The newly organized Wisconsin Chapter applied for recognition. Recognition was granted.

The meeting adjourned at 4:15 p.m.

EXECUTIVE BOARD MEETING

Saturday, December 27, 1958, Chicago, Illinois

The Executive Board of the Industrial Relations Research Association met on Saturday, December 27, at 12 noon at the Conrad Hilton Hotel in Chicago. Present were: President E. Wight Bakke; Board Members Otis Brubaker, Harry Douty, Murray Edelman, Robben Fleming, William Haber (President-elect), Peter Henle, Charles Killingsworth, Arthur Stark, Leo Teplow, Harry Weiss; Secretary-Treasurer Edwin Young; Editor Gerald Somers; and Sander Wirpel, the chairman of local arrangements for the 1958 Annual Meeting.

The Secretary-Treasurer presented the report of the elections committee. The results of the mail balloting, with 686 ballots returned, were as follows: 1959 President, William Haber; elected to the Executive Board, Milton Derber, Ronald Haughton, Herman Somers, Ross Stagner. The Secretary-Treasurer also reported that the membership showed a small increase over 1957. The President suggested that membership application cards be distributed among the members with a request that they try to sign new members. The Secretary-Treasurer agreed to send a supply to the Board members who requested them at this time.

Mimeographed copies of the financial report were distributed by the Secretary-Treasurer. It was moved and seconded to accept the report. Motion carried.

President Bakke read brief reports on the status of the Davey and Heneman volumes. The former (*New Dimensions In Collective*

Bargaining) is in print and will soon be mailed to members. Some chapters of the latter book are finished, and arrangements for publication by Harpers are being completed.

The President read a letter from Arnold Zack requesting consideration by the Board of an application for recognition of the Boston group as a local chapter of IRRA. The President reported having met with Saul Wallen and an enthusiastic group in Boston, and recommended that their application be accepted. It was moved and seconded to approve. Motion carried.

The next matter on the agenda was that of the forthcoming Spring Meeting to be held in Boston on May 1 and 2, 1959. The program was discussed, and the time for the Executive Board meeting set for the morning of May 1.

Discussion of the 1959 Annual Meeting revolved around the advantages and disadvantages of meetings in alternate years with one or another of the Associations that hold fall meetings.*

The Board next discussed sponsorship of an essay contest. The New York Chapter's proposal that its essay contest be made national has been circulated among all the local chapters, with replies from nine (Philadelphia, Illinois, Cornell, Chicago, Washington, D. C., Michigan State University, Detroit, New York, and Boston). It was proposed that each chapter conduct a competition for the best essay on an industrial relations topic, and that the winners of the local contests be judged for a national prize. Three of the chapters responding thought it would be difficult, on the basis of their membership, to offer \$75 (the cost of a \$100 bond). The question was raised at the St. Louis meeting concerning the interest of some Foundation in the project; it was found that there might be such interest if the contest were on a national rather than local basis. Mr. Teplow mentioned additional advantages that would come from carrying out the award on a national basis: local chapters would have to communicate with all of the colleges in the area, and so younger people and teachers in the industrial relations field would be stimulated and made aware of the IRRA. Mr. Teplow stated he had been authorized to report that, if requested by IRRA, the American Iron and Steel Institute would be willing to supply one-half the award (not beyond

* Subsequent to this meeting of the Executive Board it was found that because of shortage of hotel space a meeting with the American Sociological Society in Chicago in September 1959, would not be feasible. Through telephone and telegraph, communication between the President, the Secretary-Treasurer, and the members of the Executive Board, it was decided to hold the Annual Meeting December 28 and 29 in Washington, D. C.

\$1500) with the thought that a labor group would be willing to pick up the tab for the other half in order to maintain the bipartisanship of IRRRA. This would give us about a year to explore other sources.

In discussion of the proposal the following questions were raised: whether the plan ought not to be more widely tested in other chapters before making it national; whether it be open just to graduates or to both undergraduates and graduates; what the timing would be; how contestants could participate in areas where there were no local chapters. On the last question, it was proposed that the President could appoint a committee to receive individual essays from such areas, and their winning essay would be sent to the national committee. The whole membership would be circularized about this. A question was raised about problems of financing. Mr. Teplow suggested ten area awards; the whole project could be covered by \$1,000. The President called for a motion.

Mr. Teplow moved that the Board advise all local chapters that it is expected that finances can be arranged to provide a local award for any chapter that desires to sponsor a contest for papers on industrial relations subjects. Papers winning chapter awards would be submitted to the secretary for review for a national award, bearing in mind Mr. Killingsworth's suggestion that one or two ad hoc committees might be set up to take care of large major areas which have no local chapter. It is expected the national Association will make available the financing of local awards as well as the national awards, the local chapter to take responsibility for local publicity. The award is to be made in the fall so that it can be announced at the Annual Meeting of the national Association, the papers being submitted to the national Association in the spring. The President might wish to appoint a small committee to iron out the details. Announcements would go out in time to permit discussion at the Spring Meeting. The plan would go into operation in the fall of 1959. Mr. Edelman seconded the motion. 7 ayes, 4 noes. Motion carried.

The Editor presented the report of the committee on publications policy, copies of which had been sent to Board members earlier. The President called for discussion of the five recommendations.

With regard to the newsletter, it was agreed to have an experimental newsletter combined with announcement of the the Spring Meeting. Mr. Haber moved that the Secretary-Treasurer be requested to edit such a letter, that he correspond with the local chapters for such other newsworthy material of membership interest, that he include reference to newsworthy items from the Board meeting,

and that the question of continuation of the newsletter be on the agenda for the Spring Meeting. Mr. Henle seconded the motion. Motion carried.

There was discussion of item 2 (the contributed-papers section of the *Proceedings*). The objectives of such a section were stated to be (a) to provide an outlet for papers, and (b) to test whether the papers submitted would indicate demand for a journal. It was suggested that the membership be circularized at the time of the Spring-Meeting mailing so that members would have an opportunity to let the President know if they have something to contribute.

The President stated the question: Acceptance of the report with the substitution of Mr. Haber's suggestions for the newsletter in place of Item 3 of the report. Mr. Killingsworth moved to amend the motion to the effect that the Board accepts in principle the recommendations of the committee and commends these recommendations to the incoming officers with the confidence that they will use their best judgment in effecting the recommendations set forth. Mr. Weiss seconded the amendment. Motion carried. The President put the original question, which carried.

The Editor continued, stating that the *Labor Law Journal* is ready to continue a policy of publishing the Association's Spring Proceedings in 1959. He asked whether the Board wishes a continuation of this policy. Mr. Henle moved that we continue the relationship. Motion seconded and carried.

The Editor reported that responses to the research report questionnaire sent out in the Annual Meeting mailing totaled 132, and included 185 separate projects. After some discussion of their disposition, Mr. Teplow moved that the Secretary be authorized to mimeograph 500 copies or more, as his judgment indicates, for distribution on a sale basis to be announced in the newsletter. This was amended to read "in such form as the Editor prepares, with the advice of the Secretary."

Publication in 1960 of a new Membership Directory was discussed. It was recommended that any suggestions for its format be sent to the Secretary-Treasurer.

Dates and places for the 1960 meetings were discussed, with decision left to a later time. The President asked the Board to convene at 12 o'clock noon on Sunday in the Tower Room for any unfinished business concerning meeting locations.

It was moved, seconded, and carried, to raise the subscription price for IRRA publications to six dollars a year, to begin in 1960.

Discussion turned to topics for future publications. Mr. Henle suggested the appointment of a committee to prepare a report, to be submitted to the May meeting, on possible topics for future meetings and special volumes for the next three years; or if this was too long a period, for one or two years. Several topics were suggested, and the president appointed a committee to report to the Executive Board at the Spring Meeting. Members of the committee are: Messrs. Haber, Haughton, Killingsworth, Stagner. The committee is to be discharged at the Spring Meeting.

The meeting adjourned at 4:40 p.m.

At the Sunday noon session, consideration was given to a 1960 spring meeting in Washington, D. C. Mr. Weiss (with the help of Messrs. Henle and Douty) agreed to explore the situation and write a letter to the Secretary-Treasurer. It was agreed that the Annual Meeting would be held in St. Louis in December 1960.

REPORT OF PUBLICATIONS COMMITTEE

To: Industrial Relations Research Association Executive Board.
From: IRRA Publications Committee

[George W. England (chairman), Roger M. Bellows, Lyle Cooper, Earl F. Cheit, Ronald W. Haughton, Herbert S. Parnes and Edwin Young].

Re: Recommendations on IRRA Publication Procedures.

The above committee met with President E. Wight Bakke and Gerald Somers on September 4, 1958 in Milwaukee to discuss the feasibility and the desirability of IRRA publication of a quarterly journal. After review and discussion of results of the previous membership poll, the committee agreed that it should develop recommendations concerning two alternatives, continuance of present publication policy or publication of a quarterly journal. It was also agreed that the two alternatives were quite different in many respects. Discussion of the two alternatives brought out the following information:

1. Based on the experience of other journals, it appears that a quarterly journal (approx. 80 pages per issue) could be put out (2,000 copies) for \$1,500.00 per year if an editor's services were furnished by a university.

2. Several universities informally provide office space and free time for editors of various journals.
3. Most professional organizations have a regular publication.
4. Several committee members reported that in discussing the possibility of a journal with IRRA members, very few people seemed in favor of publishing a journal. Reasons given included: 1) another journal in the field is not needed, 2) difficulty of obtaining good articles, 3) the special volume has more permanent value than would the journal, and 4) the present publications are good and should not be changed.
5. A periodic newsletter might serve the interests of many members as well as a journal, particularly if it includes summaries of current research.
6. The Proceedings could be expanded to include a contributed-papers section. This might satisfy those who are critical of the current method of selection of participants or authors.

After considerable discussion, the committee agreed upon the following recommendations:

1. The present publications should be continued with effort to make the schedule more exact.
2. The Proceedings should be expanded to include a contributed-papers section. The success of this section, in terms of supply of publishable material, may be helpful in determining publication policy at a later date.
3. A newsletter should be established which will attempt to serve the function of research reporting and reporting of news events in the local chapters, and that this project should be undertaken by one of the local chapters.
4. The possible readiness of IRRA establishment of a journal should be considered again in a few years after the organization has had experience with contributed papers and the newsletter.
5. At present, no further membership poll is recommended.

KELLOGG, HOUGHTON AND TAPLICK

CERTIFIED PUBLIC ACCOUNTANTS
Insurance Building
Madison 3, Wisconsin

December 20, 1958

Executive Board
Industrial Relations Research Association
Madison, Wisconsin

Gentlemen:

We have audited the cash receipts and disbursements of the Industrial Relations Research Association for the fiscal year ended November 30, 1958 and submit herewith our report consisting of this letter and the following exhibits:

Exhibit "A"—Statement of Cash Receipts and Disbursements for the Fiscal Year Ended November 30, 1958

Exhibit "B"—Comparative Statement of Cash Receipts and Disbursements for the fiscal years ended November 30, 1957 and November 30, 1958

Exhibit "C"—Bank Reconciliation, November 30, 1958.

The available cash resources of the Industrial Relations Research Association on November 30, 1958 totaled \$15,474.95, consisting of \$10,474.95 on deposit in the First National Bank and \$5,000.00 invested in the Home Savings and Loan Association. These balances were confirmed directly to us by the banks.

As is set forth in Exhibit "A" and "B", the cash receipts for the fiscal year totaled \$16,600.50 and the disbursements totaled \$14,335.14. The receipts exceeded the disbursements by \$2,265.36. The cash receipts in the 1957-58 fiscal year exceeded the receipts of the prior year by \$4,283.78. Membership dues receipts increased \$4,722.00 and there was a small decrease in the other items. The disbursements for the 1957-58 fiscal year exceeded the prior year's disbursements by \$961.29.

The cash receipts journals for the various classifications of income were footed by us. The cash deposited in the bank exceeded the recorded receipts by \$35.28, and we were not able to identify the source. The cash overage is shown as a separate item in Exhibit "A". All the cancelled checks returned by the bank during the year were checked to the disbursement records.

In our opinion the accompanying statements of cash receipts and disbursements fairly present the cash transactions of the Industrial Relations Research Association for the fiscal year ended November 30, 1958.

Respectfully submitted,
KELLOGG, HOUGHTON & TAPLICK
Certified Public Accountants

Exhibit "A"

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION
Madison, Wisconsin

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
Fiscal Year Ended November 30, 1958

Cash Balance—December 1, 1957.....		\$ 8,209.59
Cash Receipts:		
	\$13,285.00	
Subscriptions.....	705.00	
Sales.....	1,261.72	
Mailing List.....	317.07	
I. R. R. A. Conference.....	572.00	
Interest.....	175.00	
Royalties.....	249.43	
Cash Over.....	35.28	
Total Receipts.....		<u>16,600.50</u>
Total Cash.....		\$24,810.09
Cash Disbursements:		
Secretarial Salaries.....	\$ 2,359.08	
Social Security Taxes.....	72.42	
Printing.....	510.25	
Postage.....	544.69	
Services.....	193.31	
Publications.....	9,018.17	
Supplies.....	94.12	
Travel, Conference, and Meeting Expenses.....	1,307.50	
Telephone and Telegraph.....	84.10	
Treasurers Bond.....	62.50	
Audit Expense.....	70.00	
Miscellaneous.....	19.00	
Total Disbursements.....		<u>\$14,335.14</u>
Cash Balance—November 30, 1958.....		\$10,474.95

LOCAL CHAPTER REPORTS

BOSTON CHAPTER

Early in October invitations were sent out to the Massachusetts members of the IRRA to attend a meeting to consider the establishment of the Local Boston Chapter. Those invited felt for the most part that such a chapter would serve a valuable function as a clearing house for all the labor relations activities engaged in by the various universities and other groups in this area. It was also felt that it would provide a valuable means for bringing together the many IRRA members who would otherwise be isolated in their academic and professional communities. Thirteen of the members met on November 5, 1958 at an informal meeting at the home of Arnold Zack to discuss the new chapter. President E. Wight Bakke was in attendance and offered valuable comments on the functions and value of local IRRA chapters. Arnold Zack was selected as president pro-tem., and in turn appointed Ken Scheid chairman of the nominating committee and Wendell Macdonald chairman of the program committee, to formulate plans for forthcoming meetings. The establishment of the chapter was voted and application made for charter.

On February 24 the new Chapter held its first open meeting at the MIT Faculty Club. At that time 60 guests attended a dinner and the meeting which followed. The nominating committee offered the nomination of Wendell Macdonald as Chapter President, Arnold Zack, Secretary-Treasurer, and an Executive Committee composed of Kenneth Scheid, Robert Segal, and Charles Myers. Fifty members were enlisted for the new chapter. The speaker for the evening was William Belanger, President of the Massachusetts Council AFL-CIO, who spoke on "The Merger and Massachusetts."

It is anticipated that the new chapter will hold monthly luncheon meetings in the Boston area at which local speakers will be heard on subjects of labor relations interest. In addition the IRRA is providing the use of its mailing lists for members who might be interested in attending labor relations functions being held by other organizations in the area.

Special plans are being formulated for participation in the annual May meeting of the National IRRA which will be held this year in Boston.

Report submitted by Arnold Zack, Secretary-Treasurer.

CHAMPAIGN-URBANA CHAPTER

The Champaign-Urbana chapter of the IRRA consists solely of graduate students in the Institute of Labor and Industrial Relations of the University of Illinois. Their organization is known as LIRA. Members of the faculty also belong to the IRRA, but they have no formal local organization.

LIRA tries to provide a program of interesting speakers for the students throughout the semester in order to broaden their understanding of the industrial relations field.

Last semester, speakers appearing at LIRA meetings included Tilford E. Dudley of the AFL-CIO public relations department, and Paul Maloney of Esso Research and Engineering. The first speaker of this current semester will be Solomon Barkin of the Textile Workers Union of America.

The organization, of course, gives the students a social outlet. The wives of members have banded together into a group known as LIRA WIVES and they meet about once a month to talk over mutual problems concerning everything from diapers to labor-management affairs in the home! LIRA also sponsors picnics and parties for the members, and these are always great successes.

I should like to stress the fact that LIRA is completely independent of the faculty. While LIRA does get support from the faculty, we are in no way a "company union." LIRA and the faculty even maintain a grievance procedure whereby the parties may seek redress of grievances through a formal procedure.

The officers of LIRA for this semester are as follows: President, Michael D. Schwartz; Vice President, William Ford; Recording Sec'y, Robert Crabb; Corresponding Sec'y, Irv Ginsberg; Treasurer, Edward Ghearing.

If other student groups would be interested in forming their own chapters of LIRA, I would be most pleased to hear from them. We at Illinois will be pleased to be of any assistance possible.

Report submitted by Michael Schwartz, President.

CHICAGO CHAPTER

The Chicago Chapter is in its second year of operation. Dues are \$3.00 per year and at this writing about 110 members are on the rolls. The membership is fairly well representative of the dominant groups in the industrial relations field; about a quarter

each come from either universities or companies, around a fifth are associated with unions, and the remainder are either lawyers, government employees or associated with private associations. Activities of the Chapter have concentrated on periodic meetings concerned with topics of a current and controversial nature. The most popular format seems to be dinner meetings preceded by a cocktail hour. Speakers usually talk for 45 minutes to an hour with an additional hour reserved for discussion.

Thus far, two meetings have been held in 1959. Martin Wagner, new director of the University of Illinois' Institute of Labor and Industrial Relations was the first guest. He discussed his mediation and arbitration experience in Louisville, Ky. The second speaker was Abner Mikva, Illinois State Representative. He outlined the plans and ideas he has for a state Labor Relations Bill.

Two additional meetings are scheduled for this spring. The first will be on the wage-price push, and the final one will be on the problems of civil liberties in labor unions. About 65 to 70 members and their guests attended an average meeting.

At a recent meeting the Chapter voted unanimously to work with and support a nation-wide essay contest now under consideration by the IRRA Executive Board. The Chapter supplied the appetizers for the smoker held during the 1958 meetings.

Officers for the present year are: President—John McCollum, Univ. of Chicago; Vice President—Edward Marciniak, Council on Working Life; Treasurer—Frank McCallister, Roosevelt Univ.; Secretary—Edith Arlen, Social Research, Inc.

Executive Board: Irwin Klass, Chicago Federation of Labor; Richard J. Nelson, Inland Steel Company; Joel Seidman, Univ. of Chicago; Adolph Berger, U. S. Bureau of Labor Statistics.

CORNELL CHAPTER

Fortnightly lunch discussions of topics of current interest, and of research in industrial relations, have continued to be the mainstay of the Cornell Chapter. Membership, either locally or nationally affiliated, now stands at 68.

During the first part of the year, the program emphasized international problems. Professors Alice Cook and John P. Windmuller (both of whom had spent a part or the whole of the previous year in Europe) reported on "American Labor Through European

Eyes"; Professor Gardner Clark (who had spent six weeks in the U.S.S.R. during the summer of 1958) discussed "Labor Relations in the Soviet Steel Industry"; and Professor Maurice Neufeld spoke on "Labor in a Perpetually Underdeveloped Country: The Case of Italy." Professor Neufeld has been to Italy several times, and is at present writing a history of the Italian Labor Movement.

An evening panel under the chairmanship of Professor Milton Konvitz, and consisting of Professors A. E. Kahn and Royal Montgomery of the Department of Economics and Professor Bertram Willcox of the Law School discussed the pros and cons of applying monopoly laws to labor unions—a public meeting attended by more than 200 persons. A discussion of Galbraith's "The Affluent Society," in which Professor Robert Ferguson of this School, Professor Douglas Dowd of the Department of Economics and Professor Melvin DeChazeau of the School of Business and Public Administration participated, was also widely attended. The Cornell Chapter, as a result of the interest shown in its program by persons outside the School, is planning to involve "outsiders" more heavily in its activities.

Two other meetings were addressed, respectively, by Professor Louis Ferman of Wayne State University, speaking on "Social Attitude Changes among Displaced Workers"; and by Professor Andrew Hacker of Cornell's Government Department discussing "The White Collar Proletariat."

The Spring program (planning for which at the time of writing has almost been completed) will emphasize events on this side of the Atlantic rather more. Professors Albert Blum, Kurt Hanslowe and Robert Raimon will discuss problems for the structure of unions raised by the changing composition of the work force; by industrial relocation; the slow replacement—because of retirement—of the original leadership of some unions, etc. Professor Vernon Jensen will discuss some aspects of his research on the New York waterfront; developments in the field of labor education will be described by Professors Ralph N. Campbell (president, National Institute of Labor Education), Alice Cook and Eleanor Emerson; and Professors William F. Whyte and Frank Miller will describe research which they are currently conducting. Professor Whyte will speak on personnel problems facing U. S. companies abroad; Professor Miller will describe his study of the history of personnel administration as a profession, and its current status as a profession in various plants.

Professor Robert Aronson is scheduled to report on his study of the sources of labor supply in Jamaica. The Annual dinner will be held late in April, and several speakers are being considered by the committee.

During the year, the chapter plans to streamline its constitution to enable more students to participate in its running and to enable the executive committee to benefit from the experience of past officers of the organization. The year's program has aroused much new interest in IRRA, and we hope to capture it permanently for the Association.

Report submitted by HENRY A. LANDSBERGER, *President*

DETROIT-AREA CHAPTER

Now in its fifth year of activity, the Detroit-Area Chapter continues to provide this industrial center with a unique local meeting ground for all persons with a professional interest in industrial relations problems and research. The current dues-paying membership is 165, in spite of an increase in annual dues to \$4.00.

The chapter continues to organize its activities around monthly dinner meetings which now take place on the first Thursday of each month at the attractive new MacGregor Memorial Conference Center on the Wayne State University campus. (Visitors to Detroit please note!) A reception at a nearby hotel precedes the dinner. Our program topics and principal speakers during 1958 were:

"Choosing an Arbitrator," Gabriel N. Alexander, Arbitrator.

"Tax and Accounting Aspects of Profit-Sharing Plans," H. James Gram, C.P.A.

"Influences in the Disaffection of Unionized Engineers—The Minneapolis-Honeywell Case," Everett Taft, United Automobile Workers.

"The M.S.U. Automation Studies," Jack Stieber, Einer Hardin and William Faunce, Michigan State University.

"Where Are We in Labor-Management Relations," Edwin E. Witte.

"Government Regulation of the Internal Affairs of Labor Unions," A. L. Zwerdling, Attorney.

"Long-Term Meanings of 1958 Bargaining," Stanley H. Brams, *Detroit Labor Trends*.

"'Mutual Survival' after 12 Years," E. Wight Bakke, Yale University.

The meetings ranged in size between fifty and 125 persons. The largest was in May, 1958, when many of Professor Witte's associates during his War Labor Board activities in Michigan joined the local chapter in honoring him at the end of his year as visiting professor at Michigan State University.

The principal occupational backgrounds of our dues-paying members are distributed (by percent) as follows: Management, 42; Union, 12; Educators, 12; Attorneys, 10; Mediators, 9; Other Government, 4; Arbitrators, 7; Consultants, 2; Miscellaneous, 2.

Officers for 1958-59 are: President, Gabriel N. Alexander, Arbitrator; Vice President, Hyman Parker, State Labor Mediation Board; Secretary, Mark L. Kahn, Wayne State University; Treasurer, Joseph F. Jannuzzi, Michigan Bell Telephone Company. (Past Presidents hold permanent tenure on the Advisory Board.) Our hard-working Program Committee, created last year, has proved to be a valuable asset.

Report submitted by Mark L. Kahn, Secretary.

MICHIGAN STATE UNIVERSITY CHAPTER

Officers for 1958-59 academic year are as follows: President, Dr. Dalton E. McFarland, Associate Professor of Business Administration; Secretary-Treasurer, Dr. William Faunce, Assistant Professor of Sociology and Anthropology.

Members of the M.S.U. chapter are drawn from the ranks of state government officials, union and business leaders in Lansing; from faculty members and graduate students of departments of business administration, economics, psychology, sociology, history, and political science; and staff members of the Labor and Industrial Relations Center.

The chapter has approximately 30 members, and an average attendance at its monthly meetings ranging from 40 to 75. The programs have consisted of reports by researchers presenting their findings, or of addresses by leading union, business, and government representatives. Sessions are planned informally, with ample

time for detailed questioning and analysis of the presentations of the speakers.

Among the more recent programs were: (1) an address by Mr. Walter Oberer on the functioning of the UAW Public Review Board, (2) a talk by Dr. William Form of MSU's Department of Sociology and Anthropology and the Labor and Industrial Relations Center, on "Images of Community Power: Business and Labor," (3) Dr. Edwin Beal of Western Michigan University discussed "Co-determination in German Industry," with implications for shop committees in the United States and (4) a panel discussion program on "Grievance Procedures and Labor Problems under Michigan State Civil Service."

Professor Einar Hardin of the Department of Economics has been serving this year as Program Chairman. Past and forthcoming programs have been planned so as to involve as many as possible of the various disciplines having research interests in the field of industrial relations, and to appeal to the wide range of interests among its members and supporters.

Report submitted by Dalton E. McFarland, President.

NEW YORK CHAPTER

Current officers of the Chapter are: President: Jack Chernick, Institute of Management and Labor Relations, Rutgers University; Vice-President: James C. Hill, New York State Board of Mediation; Secretary-Treasurer: Carl Carlson, International Association of Machinists.

Our current membership of approximately 130 is larger than at any time since the formation of the Chapter. We do not, however, have as large a representation of union persons as we should like. Special efforts to increase the number of members from trade union organizations have thus far been only partly successful. The preponderance of the membership consists of personnel and industrial relations people from companies in the New York metropolitan area.

It may be of interest to note that despite rather minimal expenses in the operation of our Chapter, we found ourselves in a straitened financial situation in the fall of 1958 and were forced to raise our dues from \$3 to \$4.

Programs during the early part of 1958 included discussions of

(1) reduction in hours of work and (2) the issue of profit sharing, with some consideration of the implications of the plan advanced at that time for the automobile industry by the UAW. The annual meeting in 1958 was addressed by Professor E. Wight Bakke, who talked on "The Human Resources Function." His talk was later published and distributed by the Yale Labor and Management Center. During the later part of 1958 our meetings were devoted to analysis of the components and sources of power in union and management organizations and the consequences of these for collective bargaining. Plans have already been made for having Professor Richard A. Lester of Princeton University address the 1959 annual meeting.

The Chapter made its second annual award for the best essay by an undergraduate in any of the colleges in the New York area on some aspect of industrial relations. The winning essay, entitled, "A Study of Escalator Clauses in Industrial Relations" was presented by Miss Bette Silver, a student at CCNY. The contest is being held again this year. In the meantime we hope it will be possible for the National Association to implement the proposal made by Leo Teplow that a similar contest be organized on a national basis.

Report submitted by JACK CHERNICK, *President*

PHILADELPHIA CHAPTER

The Philadelphia Chapter of the IRRA has, in the 1958-59 season, launched two different series of interrelated meetings.

The first of these (growing partly out of the Taylor-Pierson book on *New Concepts in Wage Determination*) was entitled: "What Do We Pay Wages For?" This topic was introduced at the first meeting by William Gomberg (at present at Columbia University) and Robert Worden, a local management consultant. Emerson Schmidt, of the U. S. Chamber of Commerce, followed next with "Fringe Benefits," with Eli Oliver, of the Labor Bureau of the Midwest, discussing subsequently "Criteria for Negotiating Wage Changes." The series closed on the thoughtful talk on the question whether general principles of wage determination can be discerned, by Charles Stewart, Deputy Assistant Secretary of Labor.

The second series, tying in with the first through the problem of real income, deals with the question of "The Consumer and

Labor-Management Relations." We felt that the "third party" aspect of industrial relations is too often neglected, and that we should draw our members' attention to it. We started with: "The Consumer's Real Income: Is Labor Oriented Towards His Needs?" Colston Warne of Amherst and President of Consumers' Union introduced it, and Seymour Brandwein of the AFL-CIO answered him. Professor Dorothy Brady, now at the University of Pennsylvania, was the discussant. The second evening is devoted to the topic: "Crossing the Channels of Distribution Without Being Double-Crossed: Is Labor Pricing Itself Out of the Market?" with David Kaplan, formerly of the Teamsters, now President, the Economics of Distribution Foundation, and John M. Patterson, Vice-President of a local food chain. The third meeting deals with "Medical Care under Labor and Management Health Plans" with Dr. Herman Somers of Haverford College and Dr. Frederick Mott, now of the Detroit Community Health Association and the UAW, previously with the UMW. The Executive Director of the Hospital Council of Philadelphia was the discussant.

In addition to these two series, we had an appraisal of the recent trend in NLRB decisions by Helen Humphrey and Gerhard Van Arkel, both lawyers from Washington, D.C. and in addition a most enjoyable evening discussing the question: "Are Strikes more Effective Solving Grievances than Arbitrations?" with George Brooks of the Pulp and Paperworkers and Herbert Northrup of General Electric, and a battery of the National Academy of Arbitrators fighting from the floor!

For the last meeting of the year we still hope that Clark Kerr, President of the University of California, will be able to get to Philadelphia. In general, the program gave a variety of programs to a membership with rather diversified interests.

Report submitted by KIRK R. PETSHEK, *President*

WASHINGTON CHAPTER

The Washington Chapter continued to meet monthly during 1958-59. Of the eight meetings during the year, three were devoted to collective bargaining problems, two to wage-price relationships and one each to labor legislation, international labor affairs, and

social security. The speakers at these meetings and their subjects were as follows:

(1) Robert R. Nathan, Nathan Associates, and Emerson Schmidt, U. S. Chamber of Commerce—"Who is responsible for inflation."

(2) Peter Henle, AFL-CIO, Herbert Stein, CED, and Murray Wernick, FRB—"Wages, prices, and productivity."

(3) Edward Cushman, American Motors—"How industry prepares for collective bargaining."

(4) Benjamin Segal, IUE—"How a big union prepares for collective bargaining." Seymour Brandwein, AFL-CIO—"How a small union prepares for collective bargaining."

(5) Vincent Ahearn, Sand and Gravel Association, Don Packard, American Trucking Association, and Charles Donahue, Plumbers and Pipe Fitters Union—"The role of the trade associations in collective bargaining."

(6) Mike Bernstein, Senate Labor Committee and Plato Pappst, I.A.M.—"Labor legislation of the 86th Congress."

(7) Serafino Romualdi, AFL-CIO, and W. S. Woytinsky—"The labor movement in South America."

(8) J. Wilbur Cohen, Michigan University—"Frontiers in social security legislation."

The officers of the Chapter during the year were Sar A. Levitan, President, Bert Seidman, Vice President, Joseph Zisman, Secretary and Lily Mary David, Treasurer. Additional members of the Executive Committee were Robert T. Borth, Nelson M. Bortz, Bernard Cushman, Joseph L. O'Brien and Abraham Weiss.

The Chapter has 180 dues-paying members; the dues are nominal—\$2.00 a year. Attendance at monthly meetings averaged about 75 members.

Following the suggestion of the national office, the Chapter is considering sponsoring an annual prize for the best essay written in the area by a college student in the field of labor.

Report submitted by SAR A. LEVITAN, *President*

WISCONSIN CHAPTER

The Wisconsin Chapter was organized in March of 1958 and presently has a membership of some eighty persons. The chapter

holds monthly meetings from October through May alternately in Madison and Milwaukee.

Our programs, beginning in April 1958, were:

"The Role of Public Relations in Labor-Management Relations," with A. H. Raskin of the New York Times; Prof. Scott Cutlip, University of Wisconsin School of Journalism; Franklin Wallick, of the Wisconsin CIO News, and Andrew Wolf of the Oscar Mayer Co.

May 1958: "Grievance Handling and Arbitration," with Prof. Gerald Somers, of the University of Wisconsin; John Waddleton, of the Allis-Chalmers Manufacturing Co., and John Heidenreich of District 10 of the International Association of Machinists.

October 1958: "Industrial Relations Developments of a Lifetime," with Prof. Edwin E. Witte, of the University of Wisconsin.

November 1958: "Labor's Legislative Goals," with Arthur J. Goldberg, special counsel for the AFL-CIO and general counsel of the United Steelworkers of America.

December 1958: "Mutual Survival—12 Years Later," with Prof. E. Wight Bakke of Yale University, immediate past IRRA president.

January 1959: "Implications of the Teamsters' Ouster for Labor-Management Relations and the American Labor Movement," with Prof. Nathan P. Feinsinger, of the University of Wisconsin Law School.

The chapter is devoting three spring meetings to the subject, "Wages, Prices, Profits, and Productivity." Dr. Ben Roberts of the University of London, Curtis Gallenbeck of the Inland Steel Products Company of Milwaukee, and union research personnel will discuss this topic with the chapter on successive months.

Officers of the chapter are John D. Pomfret, president; John R. Wrage, vice-president; Jacob F. Friedrich, treasurer; and Eaton H. Conant, secretary. Professor Somers, a founding spirit of the chapter, has been generous with his counsel and assistance.

Report submitted by EATON H. CONANT, *Secretary*

PROGRAM OF ELEVENTH ANNUAL MEETING

Chicago, Illinois, December 28 and 29, 1958

Conrad Hilton Hotel

SUNDAY, DECEMBER 28

9:30 A.M.

CRUCIAL PROBLEMS POSED BY AUTOMATION

Chairman: Charles R. Walker, Yale University

Papers:

- (a) *Automation in Manufacturing*
Charles C. Killingsworth, Michigan State University
- (b) *Automation: Effects on Labor Force, Skills and Employment*
Herbert R. Northrup, General Electric Company
- (c) *Fact, Fallacy and Fantasy of Automation*
James C. Stern, United Automobile Workers
- (d) *Organizational Impact of White-Collar Automation*
Floyd C. Mann, University of Michigan, and
Lawrence K. Williams, University of Michigan

Discussion:

Bernard Karsh, University of Illinois

George P. Schultz, University of Chicago

9:30 A.M.

VALUE OF INDUSTRIAL RELATIONS AND HUMAN RELATIONS RESEARCH TO LABOR AND MANAGEMENT LEADERS

Chairman: John W. McConnell, Cornell University

Papers:

- (a) *Practical Objectives in Industrial Relations Research*
Dale Yoder, University of Minnesota
- (b) *The Value of Industrial Relations Research to Management*
Edwin R. Henry, Standard Oil Company (New Jersey)

- (c) *The Value of University-Sponsored Industrial and Human Relations Research to Labor Leaders*
Francis A. Henson, International Association of Machinists

Discussion:

Lazare Teper, International Ladies Garment Workers Union
Arthur K. Brintnall, B. F. Goodrich Company

2:00 P.M.

PRESENT ISSUES IN UNEMPLOYMENT INSURANCE

Chairman: Wilbur J. Cohen, University of Michigan

Papers:

- (a) *Public Policy Implications of Unemployment Insurance Financing*
George F. Rohrlich, U. S. Department of Labor
- (b) *An Evaluation of the 1958 Federal and State Unemployment Insurance Legislation*
William Haber, University of Michigan
- (c) *The Role of Unemployment Compensation in Depressed Areas*
Gerald G. Somers, University of Wisconsin

2:00 P.M.

VALUE OF INDUSTRIAL AND HUMAN RELATIONS RESEARCH TO SOCIAL SCIENTISTS

Chairman: Chris Argyris, Yale University

Papers:

- (a) *Contribution of Industrial and Human Relations Research to Economists' Theory of the Firm*
John Perry Miller, Yale University
- (b) *The Influence of Human Relations Research on Psychology: In Praise of Mavericks*
Harold J. Leavitt, Carnegie Institute of Technology
- (c) *Industrial Research and the Discipline of Sociology*
Robert Dubin, University of Oregon

MONDAY, DECEMBER 29

9:00 A.M. (Joint Session with American Economic Association
at Palmer House)

CURRENT CRITICAL ISSUES IN WAGE THEORY AND PRACTICE

Chairman: Joseph Shister, University of Buffalo

Papers:

- (a) *Wage Policy and Business Activity*
George H. Hildebrand, University of California (L. A.)
- (b) *Wage-Push Inflation*
Walter A. Morton, University of Wisconsin
- (c) *Some Aspects of Wage Statistics and Wage Theory*
Harry M. Douty, U. S. Bureau of Labor Statistics

Discussion:

Milton Friedman, University of Chicago
David McCord Wright, McGill University
Mark W. Leiserson, Yale University

9:30 A.M.

APPRAISAL OF EDUCATION IN INDUSTRIAL AND HUMAN
RELATIONS

Chairman: Arnold Tolles, Cornell University

Papers:

- (a) *A Survey of the Graduate Curriculum in
Industrial Relations*
William G. Caples, Inland Steel Company
- (b) *Appraisal of Education in Industrial Relations*
Herbert G. Heneman, Jr., University of Minnesota
- (c) *Appraisal of Education in Industrial and
Human Relations*
Stanley H. Ruttenberg, AFL-CIO
- (d) *Some Observations Concerning Education in Industrial
and Human Relations*
Irving H. Sabghir, Ford Motor Company

12:30 P.M.

ASSOCIATION LUNCHEON AND PRESIDENTIAL ADDRESS

"Mutual Survival" After Twelve Years

E. Wight Bakke, Yale University

2:30 P.M.

ROLE OF LAW IN CONTROL OF INTERNAL UNION AFFAIRS

Chairman: W. Willard Wirtz, Northwestern University

Paper:

Role of Legislation in Internal Union Affairs

Clyde Summers, Yale University

Discussion:

Benjamin Aaron, University of California (Los Angeles)

Robben W. Fleming, University of Illinois

P. L. Siemiller, International Association of Machinists

1959 Spring Meeting

Boston—Somerset Hotel—May 1 and 2

Theme: "Interrelationship of public and private programs in certain areas of labor relations"

Program chairman: Arnold Zack

Local arrangements chairman: Everett Burt

1959 Annual Meeting

Washington, D.C.—December 28 and 29

Program chairman: William Haber

Local arrangements chairman: Sar Levitan

Publications

Copies of all *Proceedings* of the Annual Meetings except the Fourth, which is out of print, may be obtained from the Office of the Secretary-Treasurer, Sterling Hall, Madison 6, Wisconsin. Also available are copies of the first special

volume, *Psychology of Labor-Management Relations*, edited by Arthur Kornhauser.

Following are the Harper-published volumes in the IRRA series: *Manpower in the United States* (1954); *Emergency Disputes and National Policy* (1955); *Research in Industrial Human Relations* (1957); *A Decade of Industrial Relations Research* (1958); *New Dimensions in Collective Bargaining* (1959).

Scheduled for publication in the near future are a survey volume under the editorship of Herbert Heneman and a membership directory, in addition to the *Proceedings*.

1958 Spring Meeting

St. Louis, Missouri; Hotel Statler; May 2 and 3

Program Committee: George Seltzer, chairman; Adolph O. Berger, Lyle Cooper, Milton Derber, David Dolnick, Roland Haughton, Herbert S. Parnes, Theodore V. Purcell S. J., Joel Seidman, Sander W. Wirpel

Local Arrangements Committee: Father Leo Brown, chairman; William Gomberg, Irvin Sobel, Stanley Young

1958 Annual Meeting

Chicago, Illinois; Conrad Hilton Hotel; December 28-30

Program Chairman: E. Wight Bakke

Local Arrangements Chairman: Sander W. Wirpel

I.R.R.A.

ANNUAL PROCEEDINGS

1957