

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION

**PROCEEDINGS OF THE EIGHTEENTH
ANNUAL WINTER MEETING
NEW YORK
DECEMBER 28-29, 1965**

and

**Index of
IRRA Publications
1961-1965**

1966 OFFICERS OF IRRA

- President* ARTHUR M. ROSS, U. S. Department of Labor
- President-Elect* NEIL W. CHAMBERLAIN, Yale University
- Executive Board* BENJAMIN AARON, University of California at Los Angeles
- FRANCES BAIRSTOW, McGill University
- JACK BARBASH, University of Wisconsin
- SEYMOUR BRANDWEIN, U. S. Department of Labor
- DOUGLASS V. BROWN, Massachusetts Institute of Technology
- NATHANIEL GOLDFINGER, AFL-CIO
- GEORGE H. HILDEBRAND, Cornell University
- SAR A. LEVITAN, W. E. Upjohn Institute for Employment Research
- FRANK C. PIERSON, Swarthmore College
- ARTHUR W. SALTZMAN, Ford Motor Company
- ABRAHAM H. RASKIN, New York Times
- ROY R. REYNOLDS, Kaiser Industries Corporation
- GEORGE P. SHULTZ, University of Chicago
- HAROLD L. WILENSKY, University of California
- EDWIN YOUNG, University of Maine
- Editor* GERALD G. SOMERS, University of Wisconsin
- Secretary-Treasurer* DAVID B. JOHNSON, University of Wisconsin
- Legal Counsel* JESSE FREIDIN, Polletti, Freidin, Prashker, Feldman and Gartner, New York

PAST PRESIDENTS OF IRRA 1948-1965

- | | |
|---------------------------|-----------------------|
| 1948 EDWIN E. WITTE | 1957 DALE YODER |
| 1949 SUMNER H. SLICHTER | 1958 E. WIGHT BAKKE |
| 1950 GEORGE W. TAYLOR | 1959 WILLIAM HABER |
| 1951 WILLIAM M. LEISERSON | 1960 JOHN T. DUNLOP |
| 1952 J. DOUGLAS BROWN | 1961 PHILIP TAFT |
| 1953 EWAN CLAGUE | 1962 CHARLES A. MYERS |
| 1954 CLARK KERR | 1963 WILLIAM F. WHYTE |
| 1955 LLOYD REYNOLDS | 1964 SOLOMON BARKIN |
| 1956 RICHARD A. LESTER | 1965 EDWIN YOUNG |

Proceedings of the Eighteenth Annual Winter Meeting

**INDUSTRIAL RELATIONS
RESEARCH ASSOCIATION**

NEW YORK

DECEMBER 28 and 29, 1965

EDITED BY GERALD G. SOMERS

**INDUSTRIAL RELATIONS RESEARCH ASSOCIATION
SOCIAL SCIENCE BUILDING, MADISON, WISCONSIN 53706**

Copyright, 1966 by Industrial Relations Research Association

Requests to quote from this publication may be made to the Secretary-Treasurer of the Industrial Relations Research Association, Social Science Building, Madison, Wisconsin 53706.

\$4.00

PRINTED IN U.S.A.

1966

PREFACE

The principal focus of the Association's Eighteenth Annual Winter Meeting was the changing labor market. However, the program included other discussions reflecting the breadth of the industrial relations field, such as management research, the union as an organization, concept analysis, pension funds and labor history.

The sessions on the labor market dealt with supply factors (occupational projections), demand factors (technological change) and the problems associated with the interaction of supply and demand (unemployment, mobility and labor-market information).

Two of the labor market sessions represented an IRRA departure: contributed papers, selected for inclusion on a competitive basis. Younger members of the profession, who had not previously participated in Association meetings, were invited to submit manuscripts for consideration.

As in previous years, the meeting was held in conjunction with the Allied Social Science Associations. One session, on technological change, was held jointly with the American Economic Association; and one session, on the investment of pension funds, was held jointly with the American Finance Association.

Included in this issue is an Index of IRRA Publications for the period, 1961-65, a subject-matter classification of papers and chapters, and an alphabetical listing of authors. An index of publications for the period 1948-60 is included in the 1960 *Thirteenth Annual Proceedings*.

We are grateful to the conference participants for their prompt submission of manuscripts, and to Louis Buckley and other members of the New York IRRA Chapter for their excellent local arrangements.

GERALD G. SOMERS
Editor

PARTICIPANTS IN EIGHTEENTH PROCEEDINGS

	PAGE		PAGE
Robert L. Aronson	290	Garth L. Mangum	120
Jerold S. Auerbach	347	Frederic Meyers	194
H. Robert Bartell, Jr.	302	Roger F. Murray	312
Robert S. Bowers	154	John E. Parker	264
John R. Coleman	157	Edward Peters	333
Milton Derber	162	Michael J. Piore	250
Thomas F. Dernburg	28	Kieth Prouty	51
William Dill	68	R. Thayne Robson	151
Peter B. Doeringer	250	Jerome M. Rosow	58
William A. Faunce	111	Melvin Rothbaum	61
Fred Goldner	76	Bernard Samoff	88
William H. Gruber	220	Abraham J. Siegel	166
W. Lee Hansen	10	Robert F. Smith	204
Peter Henle	317	Emanuel Stein	298
Bernard P. Indik	114	George Strauss	83
Myron L. Joseph	183	Herbert E. Striner	21
Herman Kahn	324	Sol Swerdloff	25
Mark L. Kahn	124	David P. Taylor	276
Leon T. Kendall	319	Joseph C. Ullman	276
Gerd Korman	351	Howard M. Wachtel	233
Richard A. Lester	55	Richard E. Walton	99
Louis Levine	242	Aaron Warner	139
		Arnold R. Weber	32
		Edwin Young	2

CONTENTS

Preface	PAGE
	iii

PRESIDENTIAL ADDRESS

Arthur M. Ross, Chairman

Manpower Needs and Educational Policy	
PRESIDENT EDWIN YOUNG	2

I

THE U.S. MANPOWER FUTURE

Frederick H. Harbison, Chairman

Labor Force and Occupational Projections	W. LEE HANSEN	10
DISCUSSION: HERBERT E. STRINER, SOL SWERDLOFF,		
THOMAS F. DERNBURG		21

II

MANPOWER POLICIES AND PROGRAMS

Peter Henle, Chairman

Role and Limits of Manpower Policies	ARNOLD WEBER	32
DISCUSSION: KIETH PROUTY, RICHARD LESTER,		
JEROME M. ROSOW, MELVIN ROTHBAUM		51

III

CURRENT STATUS OF MANAGEMENT RESEARCH

Leonard Sayles, Chairman

The Manager as a Learner	WILLIAM DILL	68
Managers—An Improper Subject	FRED GOLDNER	76
DISCUSSION:*	GEORGE STRAUSS	83

* The discussion by Herbert Kaufman, presented in this session, is not included in the published *Proceedings*.

IV

THE UNION AS AN ORGANIZATION

Marten Estey, Chairman

Individual Job Rights and Union Functions: Compatible or Conflicting Forces?	BERNARD SAMOFF	88
Leadership Strategies for Achieving Membership Consensus During Negotiations	RICHARD E. WALTON	99
DISCUSSION :	WILLIAM A. FAUNCE, BERNARD INDIK	111

V

Joint Meeting With American Economic Association

ADJUSTMENTS TO TECHNOLOGICAL CHANGE	GARTH MANGUM, (Chairman)	120
Airline Flight Crews: Adjustment to Technological Change in a Regulated Growth Industry	MARK L. KAHN	124
Technology and the Labor Force in the Offshore Maritime Industry	AARON WARNER	139
DISCUSSION : R. THAYNE ROBSON, ROBERT S. BOWERS, JOHN R. COLEMAN		151

VI

CONCEPT ANALYSIS IN INDUSTRIAL RELATIONS	MILTON DERBER (Chairman)	162
The Extended Meaning and Diminished Relevance of "Job Conscious" Unionism	ABRAHAM SIEGEL	166
The Concept of Bargaining in Industrial Relations	MYRON L. JOSEPH	183
The Analytic Meaning of Seniority	FREDERIC MEYERS	194

VII

CONTRIBUTED PAPERS
UNEMPLOYMENT IN A CHANGING LABOR MARKET

Gertrude Bancroft, Chairman

- The Impact of Mass Layoffs, July 1963–June 1965
ROBERT F. SMITH 204
- The Use of Labor Force Participation and Unemployment
Rates as a Test for Structural Difficulties
WILLIAM H. GRUBER 220
- Hard-Core Unemployment in Detroit: Causes and Remedies
HOWARD M. WACHTEL 233
- DISCUSSION : LOUIS LEVINE 242

VIII

CONTRIBUTED PAPERS
INFORMATION, MOBILITY AND ADJUSTMENTS
IN A CHANGING LABOR MARKET

George H. Hildebrand, Chairman

- Labor Market Adjustment and Internal Training
PETER B. DOERINGER AND MICHAEL J. PIORE 250
- Interactions of External and Internal Labor Markets
for Engineers and Scientists JOHN E. PARKER 264
- The Information System in Changing Labor Markets
JOSEPH C. ULLMAN AND DAVID P. TAYLOR 276
- DISCUSSION : ROBERT L. ARONSON 290

IX

Joint Meeting With American Finance Association

UNION AND MANAGEMENT INTERESTS IN THE
INVESTMENT OF PENSION FUNDS

EMANUEL STEIN (Chairman) 298

Patterns of Pensions Fund Investment	H. ROBERT BARTELL, JR.	302
Management Interests in the Investment of Pension Funds	ROGER F. MURRAY	312
DISCUSSION :	PETER HENLE, LEON T. KENDALL	317

X

LABOR HISTORY

Irving Bernstein, Chairman

Some Problems in the Writing of Labor History	HERMAN KAHN	324
Recent Literature in American Labor History	EDWARD PETERS	333
DISCUSSION :	JEROLD S. AUERBACH, GERD KORMAN	347

XI

REPORTS

Minutes of the IRRA 1965 Annual Meetings		
Spring Executive Board in Buffalo		356
December Executive Board in New York		360
General Membership Meeting in New York		364
Financial Report		366

XII

Index to IRRA Publications 1961-1965		
Subject Classifications		370
Subject Index of Contributions		371
Author Index		385
IRRA Publications List and Major Topics, 1961-1965		388

PRESIDENTIAL ADDRESS

MANPOWER NEEDS AND EDUCATIONAL POLICY

EDWIN YOUNG
University of Maine

This meeting of the IRRA has made its prime concern the manpower prospects and policies of our country. The papers you have heard have been based on research, some of which we hope has been stimulated by the IRRA. Presidential addresses, if not the products of research, hopefully point out areas where further research may be desirable. I'm going to talk about the implication of manpower studies for education and suggest areas for research as well as a plan of action. At the outset it is well for me to state that I am fully aware that education serves more objectives in our society than the getting and holding of jobs, although the different purposes may not at all suggest different educational programs.

As I move along, I want to give much credit to Mrs. Sylvia Kassalow who worked very hard to supply me with background information but who cannot be held responsible for the ideas, many of which are current.

The next decade will see an approximate 25% increase in the work force from 70 millions to more than 87 millions. In that period the number of white collar workers will rise from 31 millions to 41 millions—a rise of 33%—and in that rise the demand for highly trained professional technical managers and officials will rise 45%, sales workers only 21%, and clerical workers will rise in proportion to the group. The number of blue collar workers will rise only 16%, thus becoming 34% rather than the more than 36% of the total work force they now are. The proportion of craftsmen and foremen will rise 25%, operatives 14%, non-farm laborers 5%, while the work force is going up 25%. Service workers will increase 40% from 9.2 millions to 13 millions. The number of farm workers will by 24%. Like all projections, the precise fulfillment of these is unlikely, but they are our best guesses and provide a base for analysis and planning.

The recitation of percentage changes does not adequately describe the quality of change in the work force demands. Let me illustrate: Nurses will still be nurses, but their tasks and training are undergoing very rapid changes. A few years ago, the nurses in training provided the unpaid menials in many hospitals; today, they take care of patients; in a decade, they will be skilled professional workers supervising

the care of the patients. They will have shed the three roles of maid, waitress and clerk. Nurses of the seventies will all need bachelor's degrees, and many will have master's degrees with specialties. The traditional nurses' training programs are not adequate for this. The work now done by nurses will be taken over by practical nurses, nurses' aides, food handlers, ward managers, etc., and these will not be unskilled workers. All will need training.

The computer, the electronic control device, the tape-directed machine will, as you have heard so many times, require more highly trained maintenance workers. Many of the surviving farm workers will be machine operators rather than laborers. Many technical and professional fields where most of the personnel hold bachelor's and master's degrees will want Ph.D.'s and persons with postdoctorate training.

In addition to the changes in the general composition of the work force, there will be constant shifts within. It has been suggested that the average worker will change jobs four times in his work life. One wonders how people can be educated for such a work life experience, but educated and trained they must be, for it is abundantly clear that our society has few jobs for the uneducated, unskilled and untrained, and will have steadily fewer.

As industrial relations specialists working to better prepare men and women to obtain jobs and to progress in their work careers, we are working with the stuff of which human dignity is made. Insuring some job for everyone is the first step, but there are many more.

My own career has nearly always been in education. In a sense I've never left school except for brief excursions as adviser or consultant, arbitrator or mediator, and each time I've hurried back to the peculiar excitement and bustle of a campus carrying with me some new insights, some inside dope on the outside world. As an educator and an economist, I have given a good deal of thought and some study to the problems facing American education. So many decisions are being made about education these days, and yet little is known about the subject itself. It is a field with wide research possibilities and very special implications for industrial relations students and practitioners.

Great strides have been and are being made in acquiring information about job markets, levels of employment, composition of the work force, and employment projections, and yet the practitioners call for more. We know much less about work itself, the appropriate preparation for particular jobs, and the relation of one job to another.

Learning itself has only recently begun to receive attention from psychologists and educators. A school curriculum has traditionally been constructed not on the basis of research but rather on custom and experience. A few years ago I was a member of a college curriculum committee. As that group of conscientious educators pounded out a program they thought would provide the most useful way for students to spend four years, they took particular pains to shelter Latin a little from the competitive race. The rest of the curriculum was the product, and a good one, of experience, observation, tradition, but little rising out of research. Here I do not criticize my colleagues but simply give you an illustration of curriculum building, at least at the college level, as it still persists.

It is recognized that industry will demand more and more training for its personnel on all levels. What education should come before that training is now beginning to be investigated. Jobs are being assigned to clusters, taking account of the common elements that go to make up the skills involved. Much more research is needed at identifying the training and educational elements, and we as students and practitioners of industrial relations should be involved.

If we know better the relationships between work and education perhaps we can increase the motivation to learn what is lacking in some of the young people in our school population. Preliminary reports from the Job Corps indicate that the powerful motivating influence in their classes is the desire to get a better job. How can we channel such desire for a job opportunity into a meaningful educational effort that will provide lifetime job opportunities? All of us in education have resisted the push of parents and students for practical courses which seem to them clearly job-related. Perhaps, rather than resist this job orientation, we should exploit it by showing what the relationships are between the courses we offer and the world of work. We may be much surprised at what we discover. The nature of work itself is now getting attention from psychologists and others. This may be one of the more promising ways of getting at the job-related side of education.

In various regions of the country the United States Office of Education is establishing large centers for research in learning. Shouldn't industry and labor be interested in participating in order to have some basis for establishing training programs? It may well be that if we knew more about learning we could do a much better job of upgrading and retraining our labor force.

I don't know of any exhaustive study of the educational and work experience of the G.I.'s of World War II. It seems to me that the amount of information available would be great enough to satisfy the most demanding scholar.

So much for the research program. What does one do while waiting for the research to be designed, carried out and reported? I am going to suggest a plan of action that allows us to start where we are and yet incorporate experimentation and research as we go along. In a fast-changing world where new opportunities quickly appear and where job changes are frequent and the rates of change are accelerating, an educational system that provides the greatest versatility and preserves the highest degree of freedom is the most logical choice.

The elementary schools of this country are the clear example of what I have in mind. The curriculum is basically the same for all; while the quality of instruction, the physical surroundings, the supporting materials and the individual attention given to pupils varies greatly, the subject matter is very much the same. I suggest that we now consider a common basic curriculum in the high schools as the best basis for the job world we are looking forward to. Different students will have different abilities, aptitudes and motivations. These differences should not confuse us about the subject matter that we want everyone to learn.

What is this subject matter? First, what is it that thoughtful citizens and educators complain most loudly about? Simply, it is communication or rather the lack of it, both in the form of English and mathematics. It is essential for everyone that the communication of ideas be handled more readily and effectively. In addition, there will be some who will want to be prepared on a world-wide basis and will study other languages. Great skill and imagination must be used in the teaching to accommodate the backgrounds and interests of different students. This I believe will be possible once the goal of communication is clearly defined. A fuller understanding of Hiawatha, Ivanhoe, Silas Marner and Shakespeare's plays should not be the purpose of our English classes, albeit they are delightful by-products for some of us. Rather, the purpose should be to develop skills in reading rapidly and with understanding and in writing and speaking clearly and to the point.

And so with that other language, mathematics. Some of our students are truly aiming for the stars and will certainly settle for nothing less than a planet. Others will program the automatic distributor centers

for consumer goods, some will count calories, and many will worry about taxes. Let's aim them all at the stars, letting them peel off at the limits of their ability and interest but keeping them on the main track as long as possible so that when they stop their formal learning in mathematics they will have the basic understanding and techniques that they can exploit when the challenge arises on the job or in a training situation.

On the job and off, every person needs to know about the nature of the world in which he lives. My common curriculum would include biology, physics, chemistry. Again, for different persons it would be taught at different rates with different illustrations and appealing to different motivations. For some, it will be a general and interdisciplinary course, for others the base on which the courses leading ultimately to the doctorate will be built. The principles will be the same. While on the surface welding may seem simply a technical skill, somehow the welder—or at least most—must learn that great movements of molecules and atoms are taking place under that heat and gas. For others, the science will be most attractive when presented as mathematical formulae.

And finally, I would include a large dose of history in my curriculum, perhaps with some anthropology, to provide a deeper understanding of man's relation to man.

While under my scheme the high school curriculum would have a common core for all, it would also provide opportunities for special interests such as music and athletics, art and typing, etc.

After high school the academic roads would part. Some people would move directly into technical schools, learning how to maintain electronic equipment, be secretaries or stenographers, run the kitchens for Howard Johnson and his competitors. I would hope these choices would be made on interest and aptitude, and not as a consequence of social and economic status of families. Others in increasing numbers would go one to colleges and continue their basic education either as a prelude to professional and graduate schools or as the basis for bachelor's degrees and jobs.

Many won't know what to do. These should perhaps go to two-year junior colleges or university centers and there have time to discover what they really want to do. Many will find within themselves the necessary abilities and interests to transfer to a university. Some will go to technical schools, and others to employers for on-the-job training.

Under this scheme, there are opportunities to change one's mind, to train and to retrain.

My suggestion proposes that our young people be kept in the main stream of education as long as possible in order to make the most of their talents. It does mean that under conditions of full employment employers will have fewer persons with ability well above the job requirements. It means more careful planning, more careful job analysis, and better training programs. It may also mean having a better basis on which to build in the job assignments.

But what about the humanities? What about the values of society? Have I gone all out materialistically? The task I set for myself was to sketch broadly an educational system that would prepare Americans for the job markets of the future. Had I come here today to talk about a curriculum that would lead to a better understanding of human values, traditions and culture, I would have suggested one built on language, mathematics, science and social science. But that is another subject.

I

THE U. S. MANPOWER FUTURE

Frederick H. Harbison, Chairman

LABOR FORCE AND OCCUPATIONAL PROJECTIONS

W. LEE HANSEN
University of Wisconsin

In the past few years we have witnessed a phenomenal spurt of interest among policy-makers and labor economists in both the art and science of manpower projections. But accompanying this interest, and indeed stimulated by it, there has been a growing dissatisfaction with projections, as evidenced by a succession of conferences, sessions at professional meetings, and published papers appraising them. The results of these appraisals tend to be mixed. A majority view is that work on projections should continue; in one case, the argument rests on the assumption that by gathering more and better data the quality of projections can be improved significantly, while in the other case, greater emphasis is placed on the use of new and quite different techniques and approaches. The minority view questions whether the effort to make projections is worthwhile; in one case, it is argued that the present state of knowledge is so deficient and the data so poor that the resulting projections will be of little value, while in the other case, the claim is made that meaningful projections are in principle impossible to make.

The exact nature of the arguments on which these conclusions have been drawn has not always been clear. Hence, it seemed useful to consider a number of issues which would help us to determine how and whether work on projections should continue, even if no final judgment on these questions is offered.

THE UNDERLYING ISSUE

Projections are designed to increase the stock of knowledge about future labor market conditions and thereby to improve the level of decision-making on the part of workers, potential workers, counselors, employers, educator-trainers, and manpower planners. But what is at issue is whether the benefits, in some elusive sense, exceed the costs of projections and by how much. Our predisposition is to assume that projections do yield positive—and perhaps sizeable—net benefits. This rests on the more general assumption that more knowledge and infor-

*I am indebted to Gerald Somers, Glen Cain, and especially Burton Weisbrod for their penetrating criticisms and suggestions.

mation are better than less, particularly when the costs of supplying more knowledge and information seem to be relatively small. Yet the validity of this predisposition is certainly moot. Indeed, if we consider the possibility of both positive and negative benefits, we might speculate that the gross benefits are zero or even negative, irrespective of what the costs might be. (Negative benefits would result from directing people into occupations or industries where openings no longer existed—either because the projection was wrong or the response to it greater than anticipated.) At the moment we have little or no evidence on these matters.

The customary defense of projections is that despite their present deficiencies they serve better than does “sheer speculation.” If this were the only alternative, such a defense might possess some validity. Yet there is a significant amount of information available to decision-makers of all kinds that surely ranks in quality above that of “sheer speculation.” In a sense, all decision-makers are generating their own projections based on such information, and some may be better equipped than others to do this or may have access to more and better information than do others. But whether the explicit projections now supplied deserve higher marks than the implicit projections of decision-makers can only be determined by comparing the quality of the decisions made under each situation. This is no easy task, and it is one that I do not intend to perform here. And yet it is possible to throw some light on this central issue by raising a series of questions, as is done in the following section.

Before proceeding, it will be helpful to indicate certain aspects of the subject which complicate attempts to discuss manpower projections with the necessary degree of sharpness. First, it is important, though often difficult, to keep in mind the distinction between manpower projections as they are currently produced and some “ideally” constructed projections. Limitations in both data and methodology may prevent the implementation of some “ideal” approach, even if we could decide precisely what it was. Nonetheless, there seems to be ample room for small improvements and adaptations to the existing approach which would move current practices at least a bit closer to the “ideal.” Second, difficulty is frequently experienced in determining how projections are made and what their substantive meaning is. The details of projections are ordinarily spelled out so imprecisely that it is almost impossible to know what kind of an analytical model, if any,

has been employed. In view of this fact, the exact meaning of the projections is generally elusive. Third, it is difficult to evaluate projections, given the imprecision of their meaning and the range of uses to which they may be put. As will be pointed out presently, there exist several types of projections, but users cannot always be certain which type they are dealing with. Moreover, general purpose projections of the kind now supplied often ill-serve by their very grossness the needs of specific groups of decision-makers.

TYPES OF PROJECTIONS

What are the several possible types of projections that might be made? This question does not seem to have received the attention it deserves, despite the fact that it is of fundamental importance to an understanding of how projections are being made and what they mean.

There would appear to be five distinct types of manpower projections. They are of: (1) "requirements," (2) "availables," (3) "outcomes," (4) "outcomes with responses," and (5) "actuals." All of these are what might be termed "quantity" projections, in that either they are unconstrained by any price assumptions, or the price implications of quantity changes are ignored. Hence, these projections do not involve the use of supply or demand schedules and shifts in them. Partly as a consequence of this, the terminology which follows may tend to be somewhat imprecise.

Type 1: Projected "requirements" (R) indicate the number of workers needed in view of the assumptions embodied in the projection; these assumptions relate to the level and composition of final demand, productivity change, factor substitution, and the like.

Type 2: Projected "availables" (A) reflect the stock of workers that will be on hand in view of the assumptions set forth; these relate to patterns of attrition, flows of new entrants, and so on, as well as to the level and composition of final output.

Type 3: Projected "outcomes" (R-A) set forth the *ex ante* expected levels of employment or labor force levels produced by the interplay of "requirements" and "availables." The results would be interpreted as projected "surpluses" or "shortages" of "availables," though they might just as easily be called projected "shortages" or "surpluses" of requirements."

Type 4: Projected "outcomes with responses" [(R-A) \pm B] indicate how the simple "outcomes" projection might be modified by virtue

of the responses generated by a knowledge of that projection. The magnitude of the responses (B) would presumably be a function of the disparity between "requirements" and "availables" (R-A). These responses (B) might occur on either or both the "requirements" (B_R) and "availables" (B_A) sides, depending upon whether and how for example, factor substitutions take place to affect "requirements" and on whether and how the relative amounts of labor might change and thereby alter "availables." Thus, we might show the projected "outcomes with responses" as $[(R \pm B_R) - (A \pm B_A)]$.

Type 5: Projected "actuals" $[(R-A) \pm B \pm C]$ reflect *ex ante* responses ($\pm B$) as well as *ex post* reconciliations ($\pm C$) between differences in "requirements" (R) and "availables" (A). Essentially, projected "actuals" represent some best estimate of the levels of employment and labor force that will be observed in the projection year, given the assumptions of the projection.

Here, then, are five different types of projections. Ordinarily, and despite the similarity in terminology, at least with respect to "requirements," it is not clear whether the projections made are of type 1, 2, 3, 4 or 5. For the sake of focusing the discussion which follows, I wish to state at this time that most of the projections of "requirements" are actually projections of "actuals." I will comment on this point at greater length later in the paper.

ASSUMPTIONS

If the first requisite for intelligent use of manpower projections is a clear statement of what is being projected, the second is a clear statement of the assumptions underlying the projections. Not only should the assumptions be made explicit, so that they can be evaluated by the users, but they should be specified rather precisely. Moreover, several alternative sets of assumptions should be employed to help assess the sensitivity of the projections to the specific assumptions elected. For example, the assumption of a "full" or "high level" of employment (e.g., 3 per cent unemployment) is a useful one, but it would be helpful also to have additional sets of projections which reflect less favorable employment opportunities.

Even after allowance is made for the introduction of alternative assumptions, some either objective or subjective confidence intervals would help to give users an indication of the presumed accuracy of the projections. At present these are not provided, nor is any estimate of

the sampling variability of the base year figures with which the projected are usually compared. And, certainly, whatever projections are made should not be carried to a number of "significant" digits that exaggerates their degree of precision.

USES OF PROJECTIONS

Manpower projections might serve a wide variety of purposes. They are claimed to assist in individual career choice, job counseling, the development of educational and training programs, and the determination of personnel and hiring policies of firms. They are also alleged to aid in attaining the objectives of full employment, the elimination of labor bottlenecks, and more rapid economic growth. Upon careful scrutiny, however, it is not clear exactly how projections are to serve these purposes. How should individuals, employers, educators, and manpower planners respond to the information contained in the projections? In large part, this depends on knowing just what the projections mean. And this is often unclear, as we shall see.

Consider first the use of projections of "requirements." Suppose that a "requirement" for 10,000 widgetmakers for 1970 is projected. Of what use is such information? I would assert that by itself this information is worthless; on the basis of it, decision-makers have no foundation for choosing a response. Even if we compare "requirements" with the current number employed, all we know is that some change is projected. Whether "availables" will grow by an equal amount, or whether, if "availables" increase by some lesser amount, "requirements" do likewise, is impossible to deduce from this information. Indeed, the same is true if we are supplied with only projections of "availables."

To make any sense out of projections of "requirements," we must also have some information on projected "availables." Two considerations demand greater emphasis than they have received. First, the magnitude and direction of differences between "requirements" and "availables" are of considerable importance. If "availables" will exceed "requirements" for widgetmakers by 1970, the implications differ markedly from the opposite case. Second, not only is the magnitude and direction of differences between "requirements" and "availables" at a particular moment of time, important, but so are these differences beyond the projection date. For example, if by 1970, because of a strong upward trend, there are thousands of people who are training

to become widgetmakers and who will graduate in 1971 and thereafter, this presents quite a different situation than if the number of graduates will be negligible in 1971 and thereafter.

Alternatively, if we begin with projections of "availables," then information on "requirements" is also necessary. Similarly, projections of "requirements" in 1970 and also beyond are necessary for decision-makers to select the best response. So far as I can tell, no explicit attention has been paid to the "permanence" of changes in either "requirements" or "availables."

We turn next to responses. Some responses to implicit projections of Type 3 (R-A) can be expected to occur naturally through the normal operation of the labor market. As (R-A) widens, for example, some widgetmakers who might have earlier left the occupation may return, or more people may decide to take training, or employers may institute more training programs. On the other hand, employers may find it more efficient to economize on widgetmakers through the substitution of more machinery, for example. In contrast to these responses, some of which are allegedly too slow, a number of additional responses may occur as a result of publication of the Type 3 projection. These additional responses occur in the private sector because information is more widely available and in the public sector through manpower programs.

Responses of these kinds, ($\pm B$), when incorporated into a Type 3 projection (R-A), turn it into a Type 4 projection $[(R-A) \pm B]$. To know whether the incorporated responses include only "natural" ones or also projection-induced responses is most important. In either case, the publication of a Type 4 projection is likely to generate an alternate set of responses than would a Type 3 projection, even if users are informed of the nature of the differences between them. With a Type 4 projection, particularly where it is known to reflect government actions, some users might turn the projection to their own advantage by moving counter to it. By way of example, employers might begin to curtail their training programs in expectation of a stepped-up government training program.

Before considering the case of projected "actuals" (Type 5), we can take stock of this discussion by posing several questions. First, can we say with any certainty whether projections of "requirements" or "availables" are more firm? For example, it is possible that "requirements" projections may be more firm if substitution possibilities

among various types of labor or between labor and capital are relatively limited. But at present we do not know if this is so. However, we must determine the answer, because it suggests the efficient place to seek response patterns. Second, how accurate are projections of "requirements" likely to be? There now exists no method by which this accuracy can be determined, on either an *ex ante* or *ex post* basis. If "requirements" projections are subject to large errors, these errors will be greatly magnified in Type 3 projections and will probably induce unnecessarily large over- and under-responses once they are published. Such responses may prove to be considerably less efficient than the inefficient responses the projections are designed to eliminate. And third, what kinds and what amounts of responses occur naturally, and what kinds and what amounts are induced by the publication of projections? Again, we have virtually no information on this point. If nobody pays any attention to projections, then the task of making projections will be simplified by the elimination of projection-induced responses. On the other hand, non-use of projections might be good reason for suggesting that they be set aside.

If instead of making projections of the first four types, Type 5 projections of "actuals" are being made, how should decision makers treat them? Suppose that the use of 10,000 widget-makers is projected for 1970, under stated conditions of employment, and so forth. By comparing this number with the numbers of persons currently engaged in widgetmaking, one can see that a change in employment will occur. This information could be used in a variety of ways. At one extreme, everyone might accept the projection as inevitable, and so they would not respond in any special way. More likely, some responses would occur. If government made the projection, it might attempt to insure fulfillment of the projection by appropriate manipulation of manpower policies. Or individuals might respond by attempting to move into the more rapidly growing occupations. If this should happen, there is no guarantee that the responses would not be too large or too small, or indeed any different from what might have occurred anyway. But if over-responses were anticipated by some individuals, they might decide to move into occupations where under-responses would be expected to produce a relatively tight labor market. In short, most anything could happen, and so there is no guarantee that the projected "actual" will look anything like the observed figures for the projection year.

CURRENT PRACTICES

Having noted various types of projections and commented on their uses, I turn now to an examination of current projection practices. This examination is confined to labor force projections and to projections of employment for broad occupation and industry groups, as supplied by the major producer, the Bureau of Labor Statistics (BLS).

For these two classes of projections, it appears that BLS projects "actuals" rather than anything akin to "requirements," despite use of the "requirements" terminology. In the case of total labor force projections, there can be little question but that "actuals" are projected; nowhere are "requirements" referred to. On only one point could there be any ambiguity, and this is with respect to employment. The total labor force projection is based on, among other assumptions, that of high level employment. If this assumption holds, then the projected labor force should equal the observed figure. Likewise, the projected employment total should equal the observed figure. Now, the projected employment figure can and sometimes is viewed in a special way, as a "requirement" to achieve full employment, but this is not the customary way that BLS uses the term. Were some other lower level of employment assumed, the logic of calling the projected employment level a "requirement" would probably disappear. In conclusion, then, both the projected labor force and employment totals are in no sense "requirements," but rather represent an inevitable outcome of the economic environment that the projection is attempting to capture.

In the case of broad occupation and industry projections, the situation may be slightly different. Given the aggregate employment projection, one can inquire what distribution of employment among occupations and industries is implied by the assumed level and composition of final demand. A particular distribution or possibly even several might satisfy these assumptions. But whether one gains anything by calling this distribution a "requirement" is not clear; it would be more precise to note that it is a distribution implied by the assumptions and nothing more. On the other hand, the distribution of skill levels among the projected labor force total might or might not agree with the projected distribution of employment openings, even though total labor demanded (employment) equals total labor supplied (total labor force less armed forces and unemployment). Actually, some of the discrepancy might be taken up through a redistribution of unemployment, but there is no way of knowing from the projection itself what the outcome

will be. Again, whether in this context anything is to be gained from calling the distribution of employment openings a "requirement" seems questionable.

Instead of regarding the aggregate employment projection as a given, it can also be viewed as a variable. If occupation or industry employment totals are projected individually under expected production techniques, they might when aggregated exceed, equal, or fall short of the employment total derived from the labor force projection. In addition, the distribution among component groups could be quite different. Given the fact that these employment totals are independently projected on the basis of expected demand conditions and production techniques, one might wish to label the results as "requirements," in contrast to the projections of "availables" derived from the independently made labor force projections. (Unfortunately, the labor force projections are specified by age and sex only, and not by occupation or industry.) It would be necessary then to choose between these two projections or to invoke some theory to show how the responses of both B and C types would produce the "actuals." But such is not the practice. Work proceeds from the aggregate on down, presumably because of the greater availability of data. This means, however, that the broad occupation and industry projections are by their very nature projections of "actuals" rather than "requirements," except in the very special senses noted.

MEANING OF "REQUIREMENTS"

To the extent that users have attached much significance to the term "requirements" in projections, they have probably been led astray. This does not mean that the concept of "requirements" has no place in the work on projections. It does, but the task is one of developing and sharpening its meaning.

Although perusal of the literature on projections provides little help, let me try to suggest several possible definitions of "requirements."

(1) We might define "requirements" as indicating the numbers of workers needed to maintain the existing pattern of relative earnings differentials. (2) We might define it as reflecting the numbers of workers needed to maintain the existing pattern of rates of return in different occupations. (3) We might define it, to shift the emphasis slightly, as the numbers of workers needed to equalize rates of return among occupations. The implications of each of these or still other

definitions of manpower "requirements" are obviously quite different. And they differ in turn from current practices, which completely fail to specify the sense in which levels and distributions of manpower are "required."

For example, "requirements" (or "actuals") as projected currently would presumably reflect the impact of differential increases in earnings levels arising from the competitive forces set off by differential patterns of growth in "requirements;" they would also indicate changing relative costs of education and training. But maintaining the relative pattern of rates of return would impose a particular kind of constraint on changes in relative earnings patterns and on training costs and thus might produce a quite different level of "requirements." On the other hand, equalizing the rates of return would provide for differential movements in both earnings and costs, but constrained in such a way as to reduce existing differentials.

This by no means exhausts the possible ways of defining "requirements." Other limits could no doubt be devised. Each would provide a slightly different view of the quantitative implications of projected manpower "requirements." Which one is most useful depends, as always, on the problem at hand. But there is no reason for not experimenting with some of these other definitions, so as to help get a better grasp of the whole subject of projections.

CONCLUSIONS

This discussion has been devoted primarily to occupational rather than labor force projections. This is not because all the problems of labor force projections are resolved, but with the work of Bowen and Finegan, Dernburg, Cain, Easterlin, Mincer, and Tella, some of the difficulties are being rapidly laid to rest.

The present state of the art and science of occupational projections is a much more chaotic one. There remain substantial gaps in our notions about what projections are intended to accomplish, how they are to be made, how they are to be used, and how they are to be evaluated. And yet there is a growing abundance of projections available, with many more no doubt on the drawing boards right now. Instead of pushing ahead with these, we must set ourselves the task of learning more about how labor markets operate, the nature of the forces shaping the demand for and supply of labor, and the kinds and

dimensions of the equilibrating forces which are at work. Only then can we begin to say intelligent things about manpower policy.

It is easy for economists, manpower experts, and others on the sidelines to take the projectors to task for the sins and omissions of their trade. They have a job to do which they are carrying out with the concepts and tools at hand. These concepts and tools remain both primitive and inadequate, largely because we as a group have given so little of our time and talents to help shape some new ones.

DISCUSSION

HERBERT E. STRINER

The W. E. Upjohn Institute for Employment Research

As Professor Hansen has indicated in his fine paper, during the past few years we have witnessed a phenomenal spurt of interest among policy-makers and labor economists in the art and science of manpower projections. I suppose this is due to at least three reasons. First, there is the desire, in every field of endeavor, on the part of intelligent men to be able to peer into the future and foretell events to be. Second, there is the more pragmatic reason growing out of avowed public policy to deal more effectively with problems of unemployment, skill-shortage, or obsolescent vocational education curriculum. Third, is the public frustration growing out of the obviously inadequate state of the art of "peering," given the increased demands for good practitioners of this artform. Professor Hansen's paper begins to move in the direction of revealing to the parade watchers that, in all truth, the Emperor has almost no clothes on! I hope, in these brief remarks, to remove the last shred of doubt. If we are honest with ourselves and answer the question which Professor Hansen asks, though he puts it in the form of a declarative sentence, we must address ourselves to the simple and straightforward problem of how well we are able "to increase the stock of knowledge about future labor market conditions and thereby to improve the level of decision-making on the part of workers, potential workers, counselors, employers, educator-trainers, and manpower planners." In all honesty I think we have to admit that, though we are not complete failures in achieving this goal, we are falling far short of the mark. The real tragedy is that we are failing during a time when the marginal cost is particularly high for just those groups in the labor force who can do very little for themselves, the hard-core unemployed, and also when our own professional myopia tends to restrict the effectiveness of available projection techniques. Our continued emphasis on methodology is in part a retreat from reality and in part a relatively high-cost exercise in Talmudic debate.

In his discussion of Bureau of Labor Statistics projections, Professor Hansen makes it quite clear that BLS projects "actuals" rather than anything akin to "requirements," despite use of the "requirements" terminology. Thus, as Hansen correctly concludes, ". . . then both the

projected labor force and employment totals are in no sense "requirements" but rather represent an inevitable outcome of the economic environment that the projection is attempting to capture." Now, if we were all atomic physicists, I suppose we could celebrate this achievement of building a self-sustaining reactor, but this isn't the objective we have established for ourselves. Unhappily, unless there is a change, given the data we have continued to accept for massaging purposes, and the careful methodological rational we have constructed, we will *never* be able to meet our professional responsibilities. To do what we have set out to do, we must leave the comfort and solace of aggregated, national data and move into the muck and mire of disaggregated, local labor market data. Fellow economists, this is where the action is! When we talk about workers, counselors, educators and employers, we are talking about Chicago, Milwaukee, Fresno, Hoboken and Tampa. When we look at Hansen's Type 4 manpower projection relationship of:

$$[(R \pm B_R) - (A \pm B_A)],$$

the response B on the "Requirements" or "Availables" side takes place in a local labor market. And this local labor market is not some esoteric, removed, Platonic ideal. And, we can't move, by skillful manipulation of national, broad occupation groupings, from a national level to a situation in San Francisco without losing a great deal of practical meaning in the translation process. To begin to be of help, we must begin to insist that our major manpower agencies provide the sort of local labor market information we all know is necessary to do the job we claim we are doing, or capable of doing, depending on how honest we are.

Now that I have made these general statements allow me a few brief qualifications. I suspect that if we are concerned with projections we really have to differentiate between two types of problems. The first has to do with the type Professor Hansen's paper deals with, the relationship between "Requirements" and "Availables," and the type where, even given good "R" and "A" data, its operational value must depend heavily on whether it is broken down sufficiently by labor-market areas. Thus far, I have alluded to this second type of consideration, due largely to the fact that it has been accorded scant attention in Hansen's paper as well as most others and also because it is, I feel, of increasing policy-making significance. I do not, however, believe the local factor is equally important for all skill categories.

National projections of demand and supply concerning physicians, lawyers, or professor of industrial relations are far more acceptable to me than those for dental lab technicians, carpenters, nurserymen or firemen. A university in Cambridge, Massachusetts, is producing for a national market a product which is highly mobile. A vocational school in Atlanta designs curricula and establishes capital and teaching budgets on the basis of an estimated local labor market. MDTA programs are geared to meet the needs of local areas and are set up on the basis of local information. And, where that local information is lacking or misleading, an important training program is affected. Several years ago in a major metropolitan area, an effort was made to establish an MDTA photo-offset, multigraph and printing program in a vocational school. The local Employment Service was called upon to certify the high probability of placing its one hundred or so graduates. Since the number of job orders in the E.S. office were only seven at that time, this certification could not be supplied. A canvass of the industry indicated between 300 and 500 vacancies. The shortage in this city continues, and there is still no expansion of this type of vocational program in the public schools.

What are the implications of these types of situations for Professor Hansen's paper? Do we lack methodology or do we lack meaningful numbers? Depending on which it is, we as a profession must develop a different strategy affecting the allocation of our resources. Let me take one area of manpower projections which can illustrate this point. Factory substitution or the trade-off trend, by three-digit industry, between manpower and capital equipment is of utmost importance if we are to project changing manpower requirements. We cannot at present come up with any real insight into this relationship. Why? We have the technique. The input-output table, or interindustry matrix, constructed on a biennial, or annual, basis, sufficiently disaggregated will provide this information. It is possible, also, to have local tables constructed which reflect true local one-to-one relationships. But we have only national tables for 1947 and 1958. The problem here, as elsewhere in the projection field, is that we have not been sufficiently militant in our demands for more meaningful local, disaggregated data. Nor have we used our organized resources sufficiently to demand the increasing availability of data already gathered but being withheld from the public by overly protective government agencies. For those in the audience who are new to the "numbers game," let me advise a

week's visit to the data gathering and production agencies in Washington in order to discover:

- A. Large amounts of data in the manpower field not now available to researchers, and
- B. Real differences of opinion, not only between agencies but within an agency, on the desirability of releasing such manpower data to the public.

The most interesting aspect of this is the degree to which increasing demands being levied on us for more meaningful manpower projections are beginning to bring about the development of somewhat different functions for various manpower agencies. Though no stranger to the field, the Bureau of Employment Security, in its new endeavor to develop techniques for measuring local job vacancy situations, may begin to fill a need not now being met by other more traditional manpower data organizations. In addition, a growing relationship between government and private research organizations will begin to have its effects on our manpower projection programs. Contracts and grants from the Office of Manpower, Automation, and Training, U. S. Department of Labor, to the National Bureau of Economic Research and the National Industrial Conference Board have and are supporting efforts to develop more meaningful local as well as national labor force and occupational projections.

The value of Professor Hansen's paper at this juncture is to draw this audience's attention to the need to allocate more of our efforts to fundamental questions about labor market operations and the forces shaping the demand for and supply of labor, and less effort to the development of more projections. Before we project, we should reflect! This message emerges from Professor Hansen's paper. But I failed to note an effort to draw the reader's attention to the need to relate projections to local, disaggregated phenomena. We really must face up to our continuing error of omission on this item. Perhaps, each paper written on projections should end with a Cato-like admonition, not that "Carthage Must Be Destroyed!" but that "Projections must deal with problems that exist, not as our available data cause us to restructure the problems." And, perhaps before we, as a profession, issue reports on the sad state of government projections, we should ask ourselves how many of us have aided and abetted such reports and have not had the courage to reveal that in reality the

Emperor's clothes are indeed not there. Perhaps, at least in part, as that great American, Pogo, has so well put it, "We have met the enemy and they are Us!"

SOL SWERDLOFF

U. S. Department of Labor

I am pleased to have the opportunity to discuss Lee Hansen's very thoughtful paper. He has raised some interesting questions and I am glad that he has emphasized conceptual problems. I agree with some of the points that he makes but I would like to take issue with others.

I agree with him that we should work towards improvements and adaptations to existing approaches that would bring current practices closer to some "ideal" approach (if we could decide precisely what this was). I agree that projections should include a clear statement of what it is that is being projected and a detailed explanation of the analytical model used. Furthermore, I agree that the assumptions underlying the projections should be made explicit so that they can be evaluated by the users and an alternative set of assumptions should be explored to help assess the sensitivity of the projections to the specific assumptions selected.

In making those points I hope that Lee is not inferring that previous projections have not attempted to do this. I note that in the Bureau's latest projections prepared for the Automation Commission, the assumption used was a 3 percent unemployment rate. It reflected a specific GNP and its distribution for the projected year. It had a specific assumption of defense expenditures. Moreover it provided an indication based on past relationships of the effect of a difference of 1 percent in the unemployment rate, that is from 4 to 3 percent, on industry employment. As another example, in the projection for primary and secondary school teachers, the effect of a change on teacher requirements of a different assumption of teacher-pupil ratios is given.

Alternative assumptions and projections can indeed provide valuable guidelines for the user of the projection. To many users, however, particularly the less sophisticated, alternative projections tend to be confusing and of little use unless some clues to the most reasonable

estimates are provided. Moreover, in making projections, alternatives multiply geometrically and the end product may be a very large number of possible future estimates, of interest only to a few technicians.

I am much concerned with the question running throughout his paper as to whether manpower projections are in fact worthwhile. He speculates on the possible "negative" benefits of projections. I say, what negative benefits? If projections are merely a tool, a piece of information that decision makers can use or change or not use at all if they have better information, I wonder if there can be a negative benefit. Even the implicit projections which he says all decision makers are generating are not pulled out of the air; they must be made. I cannot envision that a very large percent of decision makers or other users are likely to make implicit projections that are more carefully thought out or consistent than those being developed and published. Certainly not the counselors in schools, or the program planners at the Job Corp, or the officials of most individual companies, or even those persons who might find helpful an appraisal of the adequacy of the present and perspective supply of manpower in developing policy by government and industry with respect to such matters as recruitment, development of supporting workers, scholarships, expansion of research programs, etc.

Nor do I agree with his contention that one can decide whether the explicit projections now supplied deserve higher marks than the implicit projections of decision makers only by "comparing the quality of decisions made under each situation." I would argue that this could only be determined by comparing the quality of projections themselves. One can make bad decisions on the basis of good projections and vice versa.

The paper also complains that general purpose projections "ill serve the needs of specific groups of decision makers." Of course, no one set of projections can answer all needs but they might pinpoint problem areas, for consideration of decision makers. Using these sets, other projections can be made to answer specific questions, and have, for example the manpower requirements to meet certain goals such as mental health, space, or highways when added to other demands of specialized manpower. In view of the need for projections for use in specific problems, I wonder why the paper urges the holding off of the many new projections now being developed, many of them special purpose projections to meet specific needs.

Much of the paper is concerned with describing types of projections and the definition for "requirements." I think that almost all of the types of projections mentioned have been made and can be illustrated. They have different uses and I agree should be clearly defined when published. Part of the discussion I believe is a matter of semantics. Should our projections now labeled as requirements be relabeled as he indicates "distributions implied by the assumptions?" Does this add anything for the user? Furthermore, is it not a requirement, if our goal is to achieve full employment by the assumed patterns of demand, e.g., so much investment, so much consumption, so much government spending, etc.? Since there are a variety of patterns of demand, we could have different patterns of manpower requirements. One pattern of demand may be more reasonable to expect than others and, if so, the manpower needs associated with it could be considered requirements under a reasonable pattern of demand.

Nor do I find the suggested definitions of requirements made in the paper particularly practical or useful in developing or using projections, although they are interesting on which to speculate on a theoretical basis. His suggestions of defining requirements as indicating the number of workers needed to maintain existing patterns of relative earning differentials or to maintain existing patterns of rates of return in different occupations, or to equalize returns among occupations all seem to imply that occupations are indefinitely interchangeable without regard to the technology of each industry. In fact, technology does impose limitations. Earnings are not the only determinant of occupational structure either from the employer or job seeker viewpoint.

Lee says "that we should learn more about how the labor market operates before pushing ahead with projections to help manpower planners." Certainly, we must learn more about the forces shaping the demand and supply of labor, but manpower problems exist *now* and must be attacked *now*. We have come a long way towards developing an active manpower policy with the MDTA, the anti-poverty legislation, the Vocational Education Act, etc. Their total success perhaps still is to be measured, but I do not think that we have to wait as the paper says to "begin to say intelligent things about manpower policy."

Furthermore, I believe that manpower projections are not nearly as "chaotic" and the tools nearly as "primitive and inadequate" as Lee seems to infer. Considerable work is now going on in government, universities, and other research groups both in this country and abroad

in developing and improving methodologies. Research and experiments are being conducted in such techniques as input-output analysis, economic model building, use of employer forecasts, factor analysis, etc. or combinations of these techniques.

I do join with him in the plea that economists, manpower experts, and others help in improving the concepts and help develop the tools and provide the research and information needed to produce more useable projections.

In this connection, I might mention that in the forthcoming February 1966 Monthly Labor Review, I have an article which raises some additional conceptual problems and suggest some research and data needs for making manpower projections.

THOMAS F. DERNBURG

Oberlin College

Recent research by Alfred Tella, by Bowen and Finegan, and by Kenneth Strand and myself confirms, beyond a reasonable doubt, that for most groups in the population labor force participation fluctuates positively with respect to changes in labor market tightness. It is because of this circumstance that the actual observed labor force participation rates make poor data points from which to project the full-employment labor force of the future. In his paper Professor Hansen has taken note of this difficulty and he has accordingly presented us with the challenge to provide alternative sets of projections that are based upon assumed unemployment rates, in the projected year, of three, four, and five percent respectively. It is my purpose in this discussion to accept Hansen's challenge and to present such a set of projections for 1970 with the purpose of showing how the projections are affected by differences in the degree of labor market tightness.

The estimates that are provided in the accompanying table are based on monthly data that cover the period 1953-1962. Without entering into detail as to how the original statistical model was specified, suffice it to say that we have been able, for each of the fourteen groups represented in the table, to derive an equation of the form:

$$L_1 = a_{01} + a_{11}E + a_{21}P_1 + a_{31}P + e_1, \quad [1]$$

where L_i represents the adult civilian labor force in group i , E is total employment, P_i is population in group i , P is total adult civilian population, and e_i is a residual error term. Seasonal variation having been accounted for, equation 1 divides the sources of variation in labor force participation into the classic time series components—cyclical, secular, and random. Cyclical variations in labor market tightness are accounted for by variations in employment, while long term changes are reflected in movements in P_i and P .

Adding the fourteen equations together, and ignoring the error terms gives,

$$L = (\sum a_{0i}) + (\sum a_{1i})E + (\sum a_{2i}P_i) + (\sum a_{3i})P. \quad [2]$$

Next we define the "criterion function,"

$$E = (1 - \hat{u})L, \quad [3]$$

where \hat{u} is any arbitrary unemployment rate we choose. When this criterion function is substituted into (2) it appears that total labor force may be projected as a function of the projected P_i 's and P , and the arbitrary criterion unemployment rate, \hat{u} . Let this projected labor force be denoted as L^* . Upon substitution of L^* into the criterion function we obtain the associated employment level, E^* , and when E^* is substituted into the fourteen equations 1, together with the appropriate P_i and P , we obtain the individual group projections, L_i^* .

As can be seen in the table, it clearly makes a difference which criterion rate we choose. The difference is negligible for central-aged males where participation is insensitive to the business cycle. However, for young people, old people and women, the differences are substantial.

Although the labor force difference between $\hat{u} = .05$ and $\hat{u} = .03$ is a sizeable 1.4 million, the really striking difference is in the associated employment levels. If the unemployment rate in 1970 is 3 percent and the projections are correct, the associated employment level will be 84.2 million. On the other hand if the unemployment rate is 5 percent and the projections are correct, the level of employment will be 81.1 million and this implies a difference in employment between the three and five percent projections of 3.1 million. The enormity of these differences certainly supports Professor Hansen's view that alternative projections based on different assumptions as to the degree of labor market tightness are necessary.

In conclusion it should be noted that methods of the kind utilized in making the present set of projections have the advantage that the

Projections for 1970 of the Adult Civilian Labor Force
Under Alternative Assumed Unemployment Rates

	$\hat{u} = .05$	$\hat{u} = .04$	$\hat{u} = .03$	BLS
<i>Male</i>				
14-19	4,702	4,836	4,971	4,705
20-24	6,688	6,727	6,769	6,410
25-34	11,230	11,233	11,236	11,340
35-44	10,372	10,367	10,363	10,535
45-54	10,657	10,666	10,675	10,658
55-64	7,367	7,352	7,337	7,383
65 and over	1,832	1,893	1,954	2,108
<i>Female</i>				
14-19	3,596	3,719	3,844	3,400
20-24	4,198	4,216	4,234	4,255
25-34	5,600	5,640	5,680	4,885
35-44	5,856	5,925	5,997	5,550
45-54	7,048	7,130	7,214	6,673
55-64	4,810	4,892	4,976	4,267
65 and over	1,462	1,512	1,562	1,091
<i>Totals</i>				
Male	52,848	53,074	53,305	53,139
Female	32,570	33,034	33,505	30,121
All	85,418	86,108	86,810	83,260
Employment	81,148	82,665	84,206	
<i>Differences</i>				
Labor Force	$\hat{u} (.03-.04)$ 702	$\hat{u} (.04-.05)$ 690	$\hat{u} (.03-.05)$ 1,392	
Employment	1,541	1,517	3,058	

projections that they generate may be compared with the actual outcome. For example, if in 1970 the actual unemployment rate is 3.8 percent, that rate, together with the observed 1970 population values, may be substituted into the model. The resulting predicted labor force levels may then be compared with the outcome and the source of error may be identified.

II

MANPOWER POLICIES AND PROGRAMS

Peter Henle, Chairman

THE ROLE AND LIMITS OF NATIONAL MANPOWER POLICIES

ARNOLD R. WEBER
University of Chicago

Both public investment and professional interest in manpower policies in the United States have increased sharply in the last five years. If "automation" is the scare word of the decade for those who study or participate in the labor market, the term "manpower policy" may be prescribed to calm the nerves of the distraught and offer some comfort for the future. As an index of the burgeoning interest in manpower policies, it is significant to note that three sessions and the Presidential address at last year's convention of the IRRA were devoted to this topic. Scarcely a week goes by without some assemblage of experts pushing, examining or climbing on the bandwagon. Clearly, labor economics is in the middle of the biggest gold rush since the discovery of the backward-bending supply curve.

Against this background, the term "manpower policy" is almost as difficult to define as it is to say something original bearing on the topic. On the first count, "manpower policy" is used here to denote those governmental measures that are designed to improve the operation of the labor market and the economic performance of those who are not adequately served by the conventional market mechanisms. This definition has no special claim to superiority over the others that have been formulated, but it does have the distinguishing characteristic of focusing attention on the labor market as the primary arena within which such policies are tested and implemented.¹ Thus, programs that deal with general education, mass transportation and the stability of Negro family units may have substantial indirect effects on labor market behavior; however, they encompass other, primary objectives that are socially or economically desirable in their own right.

On the second count—that of originality—we all court this quality despite the obvious deficiencies of the subject matter or the scholar. One observer, drawing on his long career as a spokesman for the medical profession, noted that, "In our civilization much kudos still attaches

¹Harbison, for example, defines manpower policy "in its broadest terms as being concerned with the *development, maintenance and utilization* of actual and potential members of the labor force." Frederick Harbison, "Critical Issues in American Manpower Policy and Practice," *Proceedings of the Seventeenth Annual Meeting of the Industrial Relations Research Association*, 1964, p. 216.

to being first in many activities in our lives, from new inventions to the elimination of virginity.”² Originality is particularly difficult to attain in an area where the generation of hypotheses can barely keep up with the establishment of new programs and the available data probably will support neither. At this point, the law of comparative advantage calls for a period of stock-taking and some attempt to determine the probable limits of manpower policies in influencing labor market developments in the United States.

THE BACKGROUND FOR CURRENT MANPOWER POLICIES

Until the last five years, manpower policies as defined above have attracted only modest attention. The traditional government emissary in the labor market has been the public employment service, which has had a checkered career beginning with its establishment as the Division of Information of the Bureau of Immigration through its marriage to the Unemployment Insurance system in the 1930's.³ Besides survival, this agency has largely been concerned with the collection and dissemination of labor market information and the job placement of unemployed workers. It flourished only during periods of national crisis, such as depressions and wars. The expansion of the public employment service in time of depression reflected the belief that much unemployment was the result of inefficient systems of labor market information and could be eliminated if job vacancy data could be collected and distributed through some central agency.⁴ On the other hand, during periods of war, the employment service functioned as an important manpower institution with powers to influence the allocation of labor in the light of national objectives.⁵ However, when grandma exchanged

² Dr. Morris Fishbein, "The Evolution of Medical Journalism in the United States," a speech delivered to the International College of Surgeons, November 10, 1964. I am grateful to my colleague Professor David Green, Jr. of the Graduate School of Business of the University of Chicago for his sharp eye for quotations which have a special relevance to academic endeavors.

³ For a history of the public employment service see, "The Public Employment Service System, 1933-53; A Brief History," in *Readings on Public Employment Services*, compiled for the Select Subcommittee on Labor, Committee on Education and Labor, House of Representatives, 88th Congress, 1964.

⁴ This theory can be traced back at least as far as the early 1900's and was espoused by William Leiserson, among others. See Michael Eisner, "William M. Leiserson and the Concept of the Organized Labor Market," unpublished manuscript, 1965. Eisner wrote this article on the basis of a detailed analysis of Leiserson's papers.

⁵ For experience during World War I see Grovenor B. Clarkson, *Industrial America in the World War*, Boston: Houghton-Mifflin, 1923, Chapter VII. Experience during World War II is described in *Readings on Public Employment Services*, *op. cit.*

her welding torch for knitting needles the employment service reverted to its customary limited role.

If government efforts to improve the operation of the labor market have ebbed and flowed in response to immediate economic circumstances, programs for preparing job seekers for employment have revealed a comforting insensitivity to changes in the market environment. The initial foray of the federal government into the area of vocational training resulted in the Smith-Hughes Act of 1917, which was designed to further training in agriculture, home economics and industry. This act was amended in 1936 and 1946 and left its stamp on government policy until the late 1950's.⁶

As they developed, federal programs for the encouragement of vocational training had two general characteristics. First, they were aimed primarily at young people preparatory to their entrance into the labor market—or the kitchen. That is, most of the aid was earmarked for the financing of high school courses in the prescribed areas. Second, there was no attempt to link these programs to the labor market on the basis of current developments or anticipated trends. To the contrary, government programs were moving against the tide. As late as 1961, 78% of the enrollees in high school vocational education programs that enjoyed federal support were being trained in either home economics or agriculture.⁷

The only time that government training efforts were closely responsive to labor market needs was during World War II. By the end of 1944, nearly fourteen million workers had been trained for jobs in war production under six general programs conducted by the Bureau of Training of the War Manpower Commission in cooperation with the U. S. Office of Education.⁸ Once the war was concluded, the former pattern was restored and except for the National Defense Education Act of 1958 little effort was made to relate training to a comprehensive manpower policy.

⁶ Sar A. Levitan, *Vocational Education and Federal Policy*, Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research, pp. 1-4.

⁷ *Ibid.*, p. 5.

⁸ "Training of War Workers Under Various Programs," *Monthly Labor Review*, December, 1944, pp. 1237-1238. The six programs and the number of enrollees for each were as follows: Vocational Training for War Production, 6,700,000; Food Production War Training Program, 3,200,000; Engineering Science and Management War Training, 1,600,000; Training Within Industry, 1,440,000; Apprentice Training Service, 1,000,000; National Youth Administration (suspended 1943), 770,000.

MANPOWER POLICIES IN THE SIXTIES

Against this background, what were the factors that created a renewed interest in manpower policies and how have the policies of the sixties differed from those that were implemented in the past?

The interest in manpower policies has been kindled by a variety of economic, political and social factors. The first flicker of concern was associated with what might be characterized as the great automation scare of the late fifties and early 1960's. Beginning with the hearings of the Joint Congressional Committee on the Economic Report in 1955, the public was subjected to a steady stream of black portents. Automation, no matter how ill-defined it might be, was the precursor of a "silent revolution" that was transforming the economic landscape. While the new technology promised great benefits it was also a potential job destroyer that threatened to leave widespread unemployment in its wake.⁹ These comments are not meant to depreciate the potential impact of current technological change on employment and other important aspects of economic welfare. Nonetheless, at this point it must be noted that the dire consequences predicted by the first generation of automation-watchers generally have not been realized.¹⁰

The impressive performance of the economy in the mid-sixties could not be foretold by these early observers. Instead, they saw a chronic unemployment rate in excess of five per cent that was resistant to both Republican and Democratic blandishments. The preoccupation with automation, however, pointed to a more scientific solution. That is, if automation was eliminating unskilled jobs it also was creating new opportunities at the higher rungs of the occupational ladder. The remedy for this structural deficiency in the labor market clearly was some program that would bridge the gap between the displaced workers on the supply side and the new jobs that otherwise might go begging on the demand side.

At this point, one of those fortuitous events occurred that served to crystallize much of the current thinking into a compelling policy proposal. In quest of new perspectives on the American problems, Secretary of Labor Goldberg journeyed to Sweden to examine that

⁹ See, for example, Donald M. Michael, *Cybernation: The Silent Conquest*, Center for the Study of Democratic Institutions, Santa Barbara, 1962.

¹⁰ For a succinct analysis of the impact of automation on the structure of employment see Ewan Clague, "Technological Change and the Structure of Employment," a paper prepared for the O.E.C.D. North American Conference on Jobs and Automation, Washington, December, 1964.

country's manpower policies. Like most tourists, Secretary Goldberg imputed an ideal quality to his hosts that probably would tarnish over a longer visit or closer scrutiny.¹¹ At any rate, the Secretary's visit helped to reinforce the belief that manpower policies, including strong doses of retraining, could push the unemployment rate off the bleak five per cent plateau where it had rested since 1957. Beginning in 1962, the Congressional machines have cranked out a sequence of legislation that may be directly identified as part of U. S. manpower policies.

Once the process of legislative enactment was under way, two additional factors impinged upon the development of national manpower programs. First, the extended economic boom finally began to erode unemployment and in 1964 the jobless rate fell below five per cent. Second, the civil rights revolution burst upon the country bringing undeniable demands for equality of economic opportunity for Negroes. The fact that the unemployment rate for Negroes was double the national figure and was significantly higher for Negro youth had obvious implications for manpower policies.

This overlay of factors has caused a significant shift in the emphasis of current manpower policies, even in the short period that they have displaced James Hoffa as a topic of table conversation among industrial relations specialists. The initial statement of the new manpower policies was found in the Manpower Development and Training Act of 1962.

¹¹ Many observers have tended to glorify Swedish manpower policies without any clear justification. Thus, it is often said that Sweden provides a model for other advanced industrial nations by retraining one per cent of its labor force annually. However, in 1963 approximately 40 per cent of the retrainees were disabled workers while another 40 per cent were women for whom retraining was often a bridge to service jobs in the market. Apparently then, only about 20 per cent of the retrainees were "prime" members of the labor force. Also, a major consideration in the development of Swedish labor market policies has been Sweden's unwillingness to rely to any great extent on the use of immigrant workers from Southern Europe to relieve the pressure on the labor force in a full-employment economy. This approach has been taken by other Western European nations such as West Germany, France and Switzerland. In addition, there are obvious differences in institutional arrangements, size, etc., which limit the broad applicability of Swedish policies to the U. S. This is not to say that Swedish spokesmen have over-sold their policies. Rather, foreign observers probably have been too quick to raise Sweden to the status of a model for emulation. For a discussion of Swedish retraining policies and experience, see H. E. Hakanson, "Vocational Training of Unemployed Persons," Swedish National Labor Market Board, 1962, also, Organization for Economic Cooperation and Development, *Labor Market Policy in Sweden*, Paris, O.E.C.D., 1963, particularly p. 69 dealing with immigration policy. The data concerning the characteristics of the Swedish trainees were reported in an interview with H. E. Hakanson of the Swedish National Board and are presumed to be correct.

As originally conceived, MDTA reflected the automation-structuralist diagnosis of unemployment. Accordingly, the major focus was on retraining displaced workers for specific jobs that were available in the labor market. In this sense, demand considerations determined the character of government activities in the manpower area.

With the improvement in the employment situation and the onset of the civil rights revolution, however, attention was diverted to the supply side of the market equation. It was now important to improve the vocational capabilities of the "disadvantaged" groups so that they might be brought into the mainstream of labor market developments and share the bounties of economic growth over the long haul. The connection between manpower programs and the demand for labor was not broken, but it had been visibly weakened.

This shift in approach was incorporated in the 1963 and 1965 amendments to MDTA and the Economic Opportunity Act of 1964. The latter program, including the Job Corps and the Neighborhood Youth Corps, insured that Negro youth, among whom unemployment is a grave social problem, would get a large share of attention without explicitly declaring this intention. Meanwhile, the Vocational Education Act of 1963 launched an attempt to rebuild the nation's vocational education system in line with anticipated labor market requirements while rectifying some of the short-run deficiencies that had been so starkly revealed by the early experience under MDTA.

This flurry of legislation has added several new dimensions to the concept of manpower policy in the United States. First, there has been an effort to integrate vocational education in general and retraining in particular with programs to improve the operation of the labor market during a "peacetime" period. Second, training activities have been related to the needs of mature, unemployed persons as well as new entrants into the labor market. Third, the MDTA provision calling attention to the underemployed implies that manpower policies are now concerned with the process of allocation in addition to simple job placement.¹² And fourth, some measures have been taken to convert the public employment service from a labor exchange absorbed with the problems of unemployment compensation claimants into a manpower

¹² This emphasis on allocation and the underemployed is included in both the statement of Findings and Purpose and the criteria for the selection of trainees included in MDTA. See Sec. 101, and Sec. 202(a).

agency which plays a key role in the implementation of the new programs.¹³

THE RECORD OF MANPOWER PROGRAMS

To what extent have the goals of the new manpower policies been realized? Three years is too brief a period to make any definitive assessment of the government programs in this area. However, some interim judgments may be made on the basis of available data.

The record is most complete with respect to the experience under the Manpower Development and Training Act, which represents the nation's basic commitment to an "active" manpower policy. After initial difficulties, the program has moved ahead with increased speed. Between August, 1962 and the end of 1964, 6,667 projects were approved for a total of 319,711 trainees.¹⁴ These figures grossly overstate the impact of MDTA within this two and one-half year period. That is, considerable slippage exists in both the number of projects that actually started and the number of retrainees who successfully completed their courses. The "hard" figure is the fact that approximately 91,000 persons graduated from MDTA courses and sallied forth in the labor market with their new skills. Of the total, about 73 per cent or 66,000 were reported to have found jobs.¹⁵

These calculations still do not provide a precise assessment of the contribution of federal training programs to employment. On the one hand, they do not take account of the drop-outs who left the course to take jobs related to the content of the training.¹⁶ On the other hand, these figures only measure the gross contribution and do not take into account the probability that some of the employed trainees pre-empted jobs that would have gone to nontrainees who consequently remain

¹³ Statements by E. Wight Bakke and Robert Goodwin, *The Public Employment Service*. Hearings Before the Select Subcommittee on Labor of the Committee on Education and Labor, House of Representatives, 88th Congress, 1964.

¹⁴ *Manpower Research and Training Under the Manpower Development and Training Act of 1962*, a report by the Secretary of Labor to Congress, March, 1965, p. 177.

¹⁵ *Ibid.* Parenthetically, it may be noted that up to December, 1964 an additional 39,000 persons had enrolled in training programs under the provisions of the Area Redevelopment Act. If the same completion rate experienced under MDTA is applied to the ARA programs (73 per cent) and those still in training are omitted from the calculations, then another 21,000 "successes" are added to the tally for a grand total of approximately 87,000 workers. *Manpower Report of the President*, March, 1965, p. 134.

¹⁶ The drop-out rate in MDTA courses has been about 18 per cent.

among the ranks of the unemployed.¹⁷ In any case, the limited impact of federal training programs is placed in perspective by the fact that in 1963-64 total employment in the economy increased by about 2.5 million and in some months seasonally adjusted unemployment fell by as much as 200,000 workers.

Beyond these aggregate statistics, additional insights may be obtained by an examination of the jobs for which the trainees were prepared. From the inception of MDTA through the end of 1964 approximately 48 per cent of the enrollees in institutional courses were being trained for semi-skilled and skilled blue collar occupations, 35 per cent fell in white collar categories such as semi-professional, clerical and sales, about 12 per cent were being prepared for service jobs and five per cent for miscellaneous occupations, many of which were related to agriculture. Within this period there has been some shift away from semi-skilled blue collar occupations in favor of jobs in the service categories.¹⁸

Although the MDTA program has covered over 500 different occupational classifications ranging from programmer to inhalation-therapy technician, it appears to do greater homage to Henry Ford and Florence Nightingale than Norbert Weiner. Thus, in 1964 about 50 per cent of the total trainees were enrolled in courses encompassing ten job categories with relatively limited horizons. These included automobile mechanic, automobile body repairman, nurse's aid and orderly, licensed practical nurse, general machine operator, welder, typist, stenographer, general office clerk and cook.¹⁹ In view of the time limits on the duration of the training and the statutory emphasis on "demand" occupations, it is not surprising that the MDTA administrators have followed this path.

The content of the training courses determined, in part, the characteristics of the trainees. In this manner, the importance of the nursing and clerical occupations has meant that a sizable proportion of

¹⁷ Albert Rees, "Economic Expansion and Persisting Unemployment," a paper presented to The University of California Conference on Unemployment and the American Economy, New York, June, 1965. This point is also raised by Michael Borus, "The Cost of Retraining the Hard Core Unemployed," *Labor Law Journal*, September, 1965, pp. 574-583.

¹⁸ "Occupational Mobility Through MDTA Training," *Manpower Evaluation Report No. 2*, U. S. Department of Labor, March, 1964, p. 2, and Manpower Research and Training, March, 1965, *op. cit.*, p. 198.

¹⁹ Manpower in Research and Training, *ibid.*, pp. 26-28.

the trainees would be women. In fact, approximately 40 per cent of the trainees in institutional courses up to 1965 were females.²⁰ It is true that an equivalent percentage of the unemployed are also women, but many of them are secondary breadwinners and unemployment in this case probably will not impose the same burdens on the family unit as male joblessness. Some evidence that many of the female trainees fall into this category is provided by the observation that only 36 per cent of this group qualified for training allowances as the head of a household.²¹

It is perilous these days to depreciate the talents or rights of women; but, if the purpose of MDTA was to offer relief to primary members of the labor force with a continuous attachment to the labor market it is not clear that the heavy representation of women in MDTA programs helps to achieve this objective. As noted elsewhere, women are also heavily represented in Swedish training programs. However, in that country the over-riding consideration for manpower policies has been the relief of labor shortages rather than the amelioration of unemployment.

The "demand" orientation that was initially imposed on MDTA has also meant that the less saleable elements of the unemployed have enjoyed only limited participation in MDTA programs. That is, in 1964, older workers comprised 27 per cent of all unemployed but constituted 11 per cent of the trainees. Similarly, about 19 per cent of the unemployed had less than an eighth grade education while seven per cent of the trainees fell in this class. By contrast, the median trainee was between 22 and 44 years of age and had a high school diploma.²² This bias has been built into the terms of the statute and the regrettable, albeit understandable, compulsion of the administrators to bring a record of instant success to Congress. The consequence of this approach has been to neglect those groups that may need help the most within the framework of MDTA and who, ironically, epitomize the victims of "structural" unemployment.

Those persons who completed MDTA programs generally fared well in the labor market in terms of subsequent employment. As indi-

²⁰ *Ibid.*, p. 16.

²¹ *Ibid.*, p. 17. The equivalent figure for males was 65 per cent in 1964. The significance of the difference between males and females is magnified by the fact that 12 per cent of the male trainees were under 19 years of age and thus less likely to be the head of a household while only 6 per cent of the female trainees were under 19.

²² *Ibid.*, p. 14.

cated previously, about 73 per cent of the graduates found jobs shortly after the completion of their courses. Although these trainees might have been led out of the wilderness, there is some indication, however, that many had not arrived in the economic promised land.

No data are available to determine the overall wage experience of MDTA trainees. Nor is there a public listing of courses actually completed during a particular calendar period. Nonetheless, a very rough approximation of the economic potential of the MDTA courses can be obtained by relating the occupational characteristics of MDTA courses that were approved in the period 1962-64 to equivalent Census classifications and examining the resultant average annual earnings. Using this approach and earnings data from the 1960 Census corrected to 1963 levels, the median annual earnings for all trainees would be \$4,506.²³ Significant differences were observed for the major occupational groups. Thus the average annual earnings would be \$3,065 for service occupations, \$4,128 for white collar occupations and \$5,481 for blue collar jobs encompassed by the approved MDTA courses.

²³ The listing of all approved MDTA courses and the numbers of trainees proposed for each course was obtained from *Manpower Research and Training, op. cit.*, 1964 and 1965. Multioccupational courses were omitted because it was impossible to get any meaningful occupational designation for these offerings. The earnings data were taken from *U. S. Census of Population, Final Report PC(2)-7A, Occupational Characteristics*, Table 28, "Wage and Salary Income in 1959 of Wage and Salary Workers in the Experienced Civilian Labor Force Who Worked 50 to 52 Weeks in 1959, by Detailed Occupation and Sex." The content of the training course was matched to the Census classifications through the use of *1960 Census of Population, Classified Index of Occupations and Industries*. Since the Census earnings data were for 1959 the medians were inflated by the percentage increase between 1959 and 1963 of the average annual earnings per full-time equivalent employee in the private economy as derived from the *Survey of Current Business*, July, 1964, Table 54.

The expected average annual earnings derived from this exercise probably overstate the earnings that a trainee could realistically anticipate. First, the data used for each occupation are average annual earnings. Because the trainees would lack experience in the occupation they probably would obtain entry jobs which paid below the average. Second, the earnings data are for 50-52 weeks of work. As the "green hand," the new trainee would be most likely to be laid off if there was any cutback in the firm's manpower requirements. And third, where there was any doubt concerning the Census classification that was most equivalent to the training course the higher paying classification was used. Thus, there were many MDTA courses for "draftsmen" but the MDTA graduates probably did not have the range of skills included in the Census classification. Nonetheless, the MDTA course was equated to the Census classification. The magnitude of these biases is not known, but it probably is significant.

As a point of comparison, the average, annual earnings for production workers in manufacturing in 1963 was \$5,180, for all employees in manufacturing it was \$5,911. Comparing these figures to the hypothetical earnings of the trainees indicates that the blue collar graduates would fare relatively well.

Undoubtedly, much of the difference among the occupational groups reflects the fact that many of the white collar and service jobs that have been the focus of MDTA programs are dominated by women. Nevertheless, these rough figures indicate that some of the government's energies are being directed to "demand" occupations for which the shortages appear to reflect low wages more than the dynamic qualities of the new technology.²⁴ The greatest economic rewards for the class of workers served by MDTA still seem to lie in the traditional blue collar sectors. As noted previously, there has been some disposition to give increased emphasis to service and white collar clerical and sales occupations within the framework of MDTA.

THE STRUCTURE OF TRAINING

Although the main thrust of federal training activities to date has centered on the institutional programs whereby unemployed persons train for specific jobs and then move out into the labor market, other arrangements have been developed to equip workers with new skills. Thus increased attention has been given to on-the-job training which generally is conducted within the practical work environment of a private firm. The employer's participation in such an arrangement supports a high expectation that the program will culminate in a job for the trainee. Little progress was made in the establishment of OJT programs during the first 18 months of MDTA. However, in 1964 over 1,000 projects were approved involving an anticipated 27,600 trainees, or 13 per cent of all trainees in all approved MDTA programs.²⁵ Of this total, about 5,500 actually commenced training.²⁶ Of greater significance is the fact that the OJT program is beginning to enlist the cooperation of associations of employers, such as the

²⁴ This is consistent with the finding that a large proportion of the vacant jobs in the service and non-professional white collar categories were unfilled because of low rates of pay or poor working conditions. V. D. Chavrid and H. Kuptzin, "Employment Service Operating Data as a Measure of Job Vacancies," paper prepared for the National Bureau of Economic Research Conference on the Measurement and Interpretation of Job Vacancies, 1965.

²⁵ *Manpower Research and Training, op. cit.*, p. 177.

²⁶ This figure overstates the progress made in private industry. Two thousand of the OJT trainees were enrolled in "Project CAUSE" to develop youth counselors to serve as advisors in the Youth Opportunity Program of the War on Poverty. Concern may be expressed over the use of funds in one program to deal with unemployment to train people to staff another program to deal with unemployment. The multiplier effect of such programs is probably unlimited.

National Tool, Die and Precision Machining Association, as well as individual firms.

At the other end of the scale, a major commitment has been made to the so-called "multioccupational" projects within the framework of MDTA. These projects have been responsive to the recent shift in the emphasis of manpower policies away from demand to efforts to upgrade the quality of the supply of labor. Drawing largely on school dropouts, with a heavy representation of Negroes, such multioccupational programs combine instruction in the basic tools of literacy and "social skills" with training in a cluster of related, semiskilled occupations. The approach is probably as much clinical as it is vocational and the courses may last as long as 72 weeks under the special literacy-training provisions of MDTA. In 1964, 241 multioccupational projects were approved for 81,000 persons, or approximately 40 per cent of all approved training positions.²⁷

In this manner, the changing labor market environment in the past three years has engendered a structure of training efforts under the umbrella of MDTA. This structure does not appear to be adapted, however, to the requirements of an effective manpower policy. That is, if the three programs were rank-ordered in terms of their relationship to actual jobs and the expectation of "success," the sequence would probably be as follows: on-the-job training, institutional training and multioccupational projects. A strong case can then be made for slotting those workers with the least likelihood of finding jobs on their own initiative into those programs with the highest intrinsic probabilities of success. Instead, the distribution of trainees among the different programs appears to have been carried out with an opposite effect. The better applicants in terms of age, education and previous employment experience have been enrolled in the OJT programs while the marginal applicant with limited experience in the labor market generally has been assigned to the multioccupational projects.²⁸

It may be asserted that the clientele for the multioccupational projects require extensive remedial work in basic education and "social skills" before they could effectively assume full-time employment. But

²⁷ *Ibid.*, p. 191. This figure was 47 per cent of all institutional training positions under MDTA in 1964.

²⁸ The analysis is blurred somewhat by the fact that the Project CAUSE trainees have been included in the published data dealing with on-the-job trainees. Many of these applicants had college work. But even when all trainees with some college experience are omitted the quality of the OJT trainees is significantly better than those enrolled in multioccupational courses.

certainly, techniques can be developed to incorporate these elements into an OJT program. Moreover, experience indicates that direct participation in useful job activity can be at least as effective as lessons in middle-class deportment in building an individual's competence and feelings of self-esteem.

These comments do not mean that MDTA should be dismissed as another noble but unsuccessful venture in manpower policies. The program is still in its formative stage and from the perspective of a cost-benefit analysis apparently has made a positive contribution to those who have enjoyed its benefits.²⁹ Nonetheless, its aggregate impact has been limited, it has not really served those who may benefit most from government aid, and the structure of the program has not been designed to best serve different classes of clientele. A second look is necessary in order to redefine the role of training in national manpower policies, not merely as they relate to economic and social crises, but over the long run as well.

MANPOWER POLICIES AND THE WAR ON POVERTY

Unlike MDTA, the War on Poverty has gotten off to a fast start, especially those components that are broadly related to manpower policies. The Neighborhood Youth Corps has provided 370,000 jobs for young people while 17,000 persons have been enrolled in 70 Job Corps Centers around the country.³⁰ It is too early to reach even tentative conclusions except to note that some of the most formidable enemies of the program have been local mayors, matrons and college professors rather than the conditions that breed poverty. Nevertheless, a few preliminary observations may be offered.

First, the Job Corps is similar in concept to the supply-oriented multioccupational projects initiated under MDTA. The major difference is that the Job Corps enrollee is placed in a bucolic environment away from the pressures of the city and home. Aside from an evaluation of the quality of the program, some question may be raised concerning the advisability of placing young people in a highly structured

²⁹ Gerald Somers and Ernest Stormsdorfer, "A Cost-Benefit Analysis of Retraining Programs." *Proceedings of the Seventeenth Annual Meeting of the Industrial Relations Research Association*, 1964.

³⁰ As reported in the *AFL-CIO News*, November 20, 1965 and the *Chicago Sun-Times*, December 7, 1965.

situation in the country in order to teach them how to live in the city.³¹

Second, the Neighborhood Youth Corps normally does not promote training in the formal sense; instead, it has been a vehicle for providing teenagers with transitional employment, often of a makeshift nature. The primary objectives of the program have been to persuade these teenagers to remain in school and to mitigate potential racial tensions. On the first count, it may be noted that there is some evidence that the drop-out rate normally increases during periods of high employment.³² Therefore, an effective program to deal with this group probably should contain elements that will facilitate the transition to the labor market as well as those which attempt to reverse the trend.

THE PUBLIC EMPLOYMENT SERVICE

As the new manpower policies have taken shape, the public employment service been given a leading responsibility for their administration. It determines the occupational areas for MDTA training programs, selects the trainees and helps place them once the course is completed. The employment service also has been enlisted in the War on Poverty and has established a network of Youth Opportunity Centers to provide a wide range of placement, testing and counseling services for young people. In addition, with the growing interest in remedial labor market activities it has been given special responsibility for a variety of groups ranging from the mentally retarded to released prisoners and Selective Service rejectees.³³ These new tasks have been superimposed on the traditional duties of the employment service involving the administration of unemployment compensation and the placement of the jobless. In this area the employment service also has sought to expand its activities by improving the quality of available labor market information, making deeper inroads into the growing white collar sector and staking its claim as a community "manpower center."

Most observers would agree that the public employment service has not yet been adapted to the demands of administering contempo-

³¹ The quality of Job Corps operations has been subjected to sharp criticism, particularly from a group of professor-consultants at Rutgers University. See "Problems at Job Corps Center?" *Christian Science Monitor*, November 24, 1965.

³² Beverly Duncan, "Dropouts and the Unemployed," *Journal of Political Economy*, April, 1965.

³³ "Special Analysis of USES Functions as Included in Statutes, Presidential Executive Orders and Interagency Agreements," Bureau of Employment Security Documents, 1965.

rary manpower policies.³⁴ Indeed, one of the most predictable aspects of analyses of manpower policies such as this is that a plea will be made to "improve" the employment service. Structurally and financially it is still closely entwined with the employment insurance system. It is further hemmed in by cumbersome federal-state relationships. Low salary levels make it difficult to recruit or retain key personnel, such as counselors and labor market analysts. Despite some strenuous efforts, over half of the non-farm placements by the employment service in 1964 were in the unskilled and service occupations while less than 5 per cent involved professional or managerial jobs.³⁵ And there are still major gaps in the employment service's program for the collection and dissemination of useful labor market information.

The admonition to improve the employment service is often accompanied by suggestions to make this agency the pre-eminent manpower institution in the country. Such recommendations overlook the essential pluralism that exists in the American labor market. Thus, most job seekers have found and probably will continue to find employment through informal channels. These informal processes are supplemented by a variety of private labor market intermediaries such as unions, private employment agencies and non-profit organizations. Recognition of this pluralism in the employment process in the United States means that the important policy issues are not those that focus on transforming the employment service into some ubiquitous manpower center. Rather, the crucial questions involve the determination of the appropriate role for this government agency and the development of efficient administrative arrangements.

SOME POLICY PERSPECTIVES

This quick review of national manpower policies gives some indication of the strengths and deficiencies of present programs. First, the government's efforts in this area have been marked by a commendable willingness to experiment with techniques to aid those workers who are not well served by normal market processes. As a result, the public's attention has been drawn in a positive manner to an important social and economic problem. Nevertheless, in demon-

³⁴ For a perceptive analysis of the public employment service see, Leonard P. Adams, "The Public Employment Service," in Becker, *In Aid of the Unemployed*, *op. cit.*, pp. 193-226.

³⁵ "Employment Service Activities Highlights," Bureau of Employment Security, July, 1965.

strating this capacity to innovate, the government programs generally have failed to develop substantial links between training activities and employer requirements in the dominant sectors of the labor market. At the outset, when the emphasis was still on "demand," a large share of the resources was directed to occupations with limited potential for the job-seeker with a continual commitment to the labor market. With the shift to programs to upgrade the supply of labor, the relationship between manpower policies and the labor market has become more distant.

How, then, may effective links be forged between the labor market and government manpower programs? The answer seems to lie in the expansion of on-the-job training. There is persuasive evidence that under appropriate economic conditions both employers and job seekers are willing to make considerable investment in such training.³⁶ In fact, most workers have acquired their skills through this route.³⁷ Even many of the glamour jobs, from programmer to instrument man, have been filled by training within the firm rather than by spending long periods dissecting a computer.

The exhortation for more attention to on-the-job training is, in a sense, question-begging. The important issue is how might such training be stimulated. Clearly, the most powerful stimulus is continued full employment. This notion is now almost trite, but the remaining skeptics may quiet their doubts with a backwards glance at our experience during World War II and a lateral view of recent developments in Western Europe. In Western Europe, in particular, sustained full employment has permitted the absorption of the most marginal groups into the active labor force. To be sure, some people will be "unemployable" in some absolute sense, but this view is more congenial to the musings of a social worker than the conventions of economists. Compared to the Moroccans, Spaniards and Southern Italians who man the steel mills and automobile plants in Western Europe, many of our jobless are equivalent to Harvard MBA's.

Thus far, political factors arising from a fear of inflation have prevented a concerted attack on unemployment through an increase in aggregate demand. Although the imperatives of foreign policy may soon render the question moot, what policy steps may be taken if

³⁶ Jacob Mincer, "On-the-Job Training: Costs, Returns and Some Implications," *Journal of Political Economy, Supplement*, October, 1962.

³⁷ United States Office of Manpower, Automation and Training, *Formal Occupational Training of Adult Workers*, Washington, D.C., 1964.

full employment is not permitted to operate as a stimulus to on-the-job training?

The problem resolves itself into one of establishing a set of incentives for the employer. In this respect, several options are available, drawing on foreign experience and other, domestic recommendations. These include direct subsidies to employers, a tax credit on "investment" in training, a tax rebate system for firms who set up their own training programs, and an exemption from increases in the minimum wage as applied to employees under twenty-one years of age. Each of these proposals has its shortcomings and pitfalls. Space does not permit a full analysis, but the most general objection is that employers would reap a windfall by doing what they would do anyway in the absence of a special inducement. Even this objection may be satisfied, however, if a *quid pro quo* is exacted in the form of standards governing the kinds of programs and, most important, the characteristics of the persons who are encompassed by the training effort.

The second major deficiency of current manpower policies relates to labor market information. Although various government agencies have taken measures to improve available labor market information, it is still not adequate to the needs of an effective manpower policy. This does not mean that the employment service, for example, should be the repository or communicant for all labor market information. The role of the government is best described in terms of some basic economic notions concerning the collection and dissemination of information.

In this respect, a distinction can be made between "extensive" and "intensive" labor market information.³⁸ "Extensive" information deals with knowledge concerning the availability and general attributes of employment opportunities and job seekers. Thus "extensive" information will relate that a job as a tool and die maker is available at the XYZ Machine Company at a rate of \$3.00 per hour and that two tool and die makers are available in the local labor market and six more are looking for work in a neighboring area. The "intensive" information will involve some assessment of working conditions, the quality of supervision and related matters on the demand side, while the employer will be interested in the sobriety of the applicants, their

³⁸ This distinction is made in a highly significant analysis by Albert Rees in a paper presented to the American Economic Association this year; "Information Networks in Labor Markets." This discussion obviously owes its inspiration—but not any responsibility—to Rees' work.

specific work experience and a variety of factors that go into an assessment of quality. Undoubtedly, there are great economies of scale to be realized in the collection of "extensive" information. However, if there are any economies to be reaped in the collection of "intensive" information they probably arise from specialization with respect to particular occupations or industries.

These distinctions help to explain the apparent division in the way that the "industry" for labor market information has been organized. That is, the public employment service has been effective as a placement agency in those labor markets where "extensive" information is most important, such as the market for farm workers and day laborers. On the other hand, many specialty agencies have emerged to collect "intensive" information for particular markets involving executives, engineers and other professionals for which screening is a vital part of the pre-employment process. Similarly, both suppliers and demanders will resort to costless or low-cost sources of "intensive" information such as friends and other employees when such sources are sufficiently reliable.

Under these circumstances, it is appropriate that government agencies like the employment service should concentrate on the comprehensive collection of "extensive" labor market information. This information would focus on both current conditions and long-range trends. The public agency should then incorporate this information in its own planning and placement activities and also insure its widest possible dissemination among potential users, including other intermediaries whose primary function is the collection of "intensive" information. In addition, the distribution of "extensive" information is especially important among those job seekers who largely interact with other unemployed persons and thus are denied the benefits of effective informal channels.

A gap still remains in this assignment of functions. Some job seekers, particularly new entrants to the labor market and displaced workers, require systematic information about their own aptitudes and interests and the characteristics of the markets which they might enter. Although a professor may deliver his son into the hands of a psychologist, it is unlikely that young people coming from poor or modest backgrounds will use this alternative. Nor are there any economic incentives for employers to offer such services. Thus intensive counseling as a source of "personal" information should be a

major component of government manpower policies. Some steps already have been taken in this direction, but, within the employment service at least, it is difficult to expect that quality services will be provided by a counselor who receives \$6,000 per year and who occupies just another desk in the local office.³⁹

The policy suggestions forwarded here are essentially modest in nature. They are based on the tentative judgment that government manpower programs to date have not had a significant impact on the unemployed or the labor market. Although it is desirable to preserve a responsiveness to immediate circumstances, greater progress may be made in the long run through the judicious use of economic incentives and the development of effective systems of labor market information. The main challenge to manpower policies is to devise programs that will improve and supplement existing institutions rather than to create arrangements that will make manpower policies an end in their own right.

³⁹ The mean minimum salary for employment counselors in the Federal-State Employment System was \$5,409 in 1964. The mean maximum salary was \$6,783. Data compiled by Division of State Merit Systems, Department of Health, Education and Welfare, January, 1965.

DISCUSSION

KEITH PROUTY

United Rubber Workers, AFL-CIO

Mr. Weber's paper affords a delightful challenge both to the reader and to the discussant. He provides a concise and non-pedantic picture of the inadequacies of present manpower policies in the U. S., makes two modest suggestions for new directions for such policies—and then leaves the door open for his commentators when he observes in his final sentence, "The main challenge to manpower policies is to devise programs that will improve and supplement existing institutions rather than to create arrangements that will make manpower policies an end in their own right."

If Mr. Weber's reader is an adherent of the "framework" school—holding that manpower policies must be tailored to considerations of national economic policy, to be fitted into a construct which includes inflationary threats, monetary management, balance-of-payments and the Dow-Jones Industrial Average—then the reader will follow Mr. Weber down the path of beefing up or cranking up (as the case may be) our present apparatus, while seeking a more humane utilization of our human resources.

If, however, one follows Mr. Weber with relish up to that ultimate sentence—only to find that the path which he seems to suggest bears the trail sign "More of the Same"—then some of us, at least, must part company with Brother Weber—with thanks for a pleasant journey—to strike out on a too-seldom-traveled road (mostly uphill) which is marked "Jobs—Target No. 1."

This is a somewhat circuitous way of stating a fairly simple concept, which I thought I found implicit in Mr. Weber's paper. Unfortunately it never comes out clearly—and he seems (if I read him correctly) to foreclose such an approach by his last sentence. That concept, which I propose to develop briefly in these comments, is simply that our manpower policies must indeed become an "end in their own right"—if by that statement we intend that the first objective of governmental economic policy *must be the creation of jobs*—in the private sector and in the public sector—*sufficient to bring unemployment levels down to tolerable limits*—now and in the decades ahead.

To be quite candid, it is unlikely that anyone in this labor-oriented audience would seriously quarrel with a priority for the job-creating function of our economy *as such*—provided we were not too tight in our definitions—and provided that we talked in well-rounded terms about the means of implementing such a target. And indeed, those of us who opt for jobs first are also among the first to agree that manpower policy does not operate in a vacuum—that the economic world of price pressures and the supply of credit and the Phillips Curve is a real world, which impinges at every turn on the decisions we would make *for jobs*. We would, moreover, agree with the neighborhood poverty program worker that it makes substantial difference to the 18-year-old Negro, who never finished 7th grade, *what jobs we create*—but more on that in a moment.

The point at issue is essentially one of establishing consensus (that pressure-loaded term) on gearing a prodigious economic apparatus to the achievement of full employment—*beginning now*. By insisting on jobs as the root issue, not only for manpower policy but for the direction in which we push the company, we call for a searching re-examination of some of those policies which have become institutions in their own right, during the 59 months of this so-called boom.

Why the hue and cry for jobs? Essentially for two reasons: first, because at the micro-level, there is nothing which we can do for the alienated individual which will more surely restore his sense of himself as a human being.

Housing—yes; literacy—yes; training for a better job—yes; educational opportunity for his children—obviously yes. But give the son of that displaced tenant farmer from Mississippi a job—and assurance that it will continue—and we have taken the major step in convincing him that the system (or “the man” in the case of the Negro) is something less than an enemy to be resisted and distrusted at every turn. Motivation, social mobility and all the rest will (hopefully) follow—but give him a job first.

The second reason, at the macro-level, is very simple, and needs no great elaboration here. The only certain route to the Great Society, and to the growth rate which is the very heart of that magnificent concept, is to provide the income-generating demand on which such growth must inevitably be based—and that means jobs—jobs now. There is no fiscal substitute yet devised by the Council of Economic

Advisers which will take the place—in this economy at this time—of a job.

The marvelous thing about this wealth-producing machinery of ours is that, if we turn the right handles at the appropriate moment, the apparatus will do approximately what we ask it to do. Two periods of wartime expansion within the last generation have demonstrated that conclusively. It is essentially a matter of putting first things first.

Give the No. 1 priority to the job-creating mechanism—and the warning bells which some observers think they hear elsewhere in the system might become the signal for more steam—not for less. The alarums which we hear from the indicator watchers when the Wholesale Price Index rumbles a bit is but one example of these expansionary jitters.

Price stability is a desirable goal, all things being equal—but a nice flat slope to the price curve is of remarkably little comfort to the family living on food stamps.

The howl of protest from the “aggregate demand” partisans when the Federal Reserve Board boosted the discount rate in early December gains—if anything—greater justification, viewed in this context. Prominent and serious spokesmen for the business (as well as the labor) community voiced their objections to higher interest rates, in fact, precisely in terms of the impact of higher money costs on employment expansion.

* * * *

Where do we start then, were we sitting in the CEA Chairman’s seat, to make the *solution* of the manpower problem the focus of national economic policy?

—We use first the tools immediately at hand—a massive program of Federally-sponsored community projects, both in the “public works” and the “community service” categories. Many of these projects would utilize large volumes of materials, and all of them would create large numbers of jobs, particularly in the unskilled and semi-skilled categories. A substantial backlog of community facility projects is already on file in Washington, needing only the appropriation of funds to set them in motion.

Note that such expansionary activity creates, at the local level, exactly the *kind* of jobs needed to make an *immediate* dent on the

unemployment level of those groups who have shared least in the current boom.

—We move on minimum wage legislation—to put a meaningful floor under those jobs, particularly in the service industries, where greatest expansion of job opportunity in the private sector has taken place in the last 59 months.

—We take a good look—and here we side with Mr. Weber—at a much broader utilization of the best vocational education institution in the country—the job site. Put on enough pressure to upgrade skills within the local plant workforce—and the private sector of the economy will respond. Our experience during World War II must surely give us courage to explore further the “trainability” of the apparently unskilled (particularly those who have thus far failed to “qualify” for the current battery of retraining programs).

—We open up for re-negotiation that seemingly sacrosanct institution, the 40 hour week. There is clearly nothing preordained about man’s working $\frac{1}{3}$ of the day’s hours—rather than $\frac{1}{4}$ —or 5 days rather than 4 in the week.

We would suggest, moreover, that serious exploration of a reduction of the work week and the work year could provide the pressure to intensify on-the-job training—even should no other efforts be made in that direction.

—We join with that Old Blue, James Tobin of Yale, in a critical appraisal of our Federal income tax structure, with particular reference to his proposals for a negative income tax to be applied to those at the bottom of the economic totem pole. Putting money in their purses will not reinvigorate, of and by itself, the mental set of the poor—but in a money economy, it is clearly a necessary step.

—We use the experience of such communities as New Haven, Connecticut (to mention one which I happen to know first hand) in developing and broadening that variety of communication channels which is so necessary to a more effectively and efficiently functioning labor market.

Mr. Weber appropriately notes the pluralism of the American labor market—and observes that the public employment service (presumably even an improved and Federalized employment service) can fulfill at best only the “extensive” needs for job information. I submit that one of the valuable by-products of the Community Action programs under the Economic Opportunities Act may well be a

restructuring and opening up of the "intensive" means by which the untutored and unregistered move into jobs.

—Finally, and perhaps most fundamentally, we take a hard look at a national incomes policy which has produced *almost no significant shift* in income distribution by family since 1947. The table below, compiled from data in a recently issued Department of Commerce report, tells its own story :

Income Rank	Percent of income received by each fifth of families ranked by income		
	1947	1960	1964
Lowest Fifth	5%	5%	5%
Second Fifth	12%	12%	12%
Middle Fifth	17%	18%	18%
Fourth Fifth	23%	23%	24%
Highest Fifth	43%	42%	41%

In raising an issue so critical to the problem of equality of opportunity, are we also unfurling the banner of equality of income at all levels? Of course not—but a jobs-oriented national manpower policy, broadly conceived, will begin to narrow the gap so painfully apparent in the table above—and begin to make meaningful the promise of equality of opportunity.

* * * *

Would the present Administration rather fight than switch? The answers seem to be, for the moment, mixed—but the decision may not rest entirely in Washington. The promise of this country's potential has some of the job-seekers and the job-needers already on the move toward broader horizons; we may have a grass-roots shift in manpower policies sooner than we think.

RICHARD A. LESTER
Princeton University

With much of Arnold Weber's paper I am in agreement. In covering so much ground in such a sweeping and challenging fashion, he does, however, invite criticism and dissent.

My remarks will be directed at two areas of Weber's paper: (1) the role of the public Employment Service and (2) adult training and retraining.

With respect to the Employment Service, Weber correctly stresses the importance of improvement in the collection and dissemination of labor market information and better means of relating personal aptitudes and interests to job characteristics and outlooks, including the need for "intensive counseling in government manpower programs." But then he argues that government agencies like the Employment Service should concentrate on what he calls "extensive" labor-market information—standardized data of a quantity-price type about the availability and general attributes of job opportunities and job seekers—and should leave "intensive" labor-market information concerning detailed aspects of particular jobs to other private intermediaries such as the "many specialty agencies."

Both the attempted extensive-intensive distinction and the policy recommendation based on it seem to me to be of dubious validity. "Intensive counseling" may be difficult without "intensive labor market information." In any event, it is quite evident from West German and Swedish experience that the public Employment Service can serve as a satisfactory intermediary for many special executive, administrative, professional, and semi-professional types of employment.

For operating purposes, the extensive-intensive distinction seems to be of very limited usefulness. Perhaps a more significant distinction for the Employment Service that is not even mentioned by Weber is that between local and national markets for different types of employment and between a locality's and the nation's interests in different types of training. Local industry may be interested almost exclusively in the preparation and supply of local types of employment regardless of national needs. That may be particularly unfortunate in agricultural, one-industry, and depressed areas.

Benefit-cost analysis would seem to provide a better basis for analyzing the limits to each of the various functions of the Employment Service than would a mental construct that arbitrarily divides labor-market information into two separate compartments. Proper analysis of individual and social benefits should take account of the interrelatedness of information, the efficiency of different methods of gathering information and making it generally available as well, for example, as the social gains from the removal of racial and other artificial barriers to labor mobility that private agencies may serve to reinforce and help to perpetuate.

Some of Weber's remarks on training are also open to serious question. It is a mistake to speak of the purpose of the Manpower Development and Training Act as "to offer relief to primary members of the labor force"—note the ill-chosen but perhaps revealing word, "relief"—and to imply that training unemployed women, including married reentrants into the work force, is somehow of a much lower order of economic importance. Incidentally, Weber's estimate that only 20 per cent of the "retrainees" in Sweden in 1963 were "prime" members of the labor force appears to be quite incorrect. That over one-third of the adult trainees in Sweden in fiscal 1963-64 were females is not only true but was partly the result of a conscious effort by the authorities to overcome labor shortages in female types of white-collar work, such as clerical and other office employment, laboratory assistants, X-ray and medical assistants, and nurses and nurses' aides. The same type of occupations have been in short supply in this country, and training of unemployed women, a significant number of whom are heads of families or the most important source of family income, for such jobs certainly should not be the subject of special attack if one thinks in economic terms of cost-benefit analysis and growth of the economy.

The measure of "success" in training is a complicated matter, which involves taking account of national as well as employer and worker interests. Whether on-the-job training is more "successful" than institutional training or some mixture of the two depends on the benefits and the costs in each case. Much on-the-job training in this country has been too superficial and specific to be of great value from a national viewpoint or even from the long-run viewpoint of many individual workers. A nationwide survey in 1962, for example, revealed that over half of the formal on-the-job training programs were some type of safety or orientation program, and that only about one-eighth of the enrollees in formal on-the-job training programs were in courses designed to provide substantive skills. Most apprenticeship programs in this country are inadequate in the number of trainees and in their instruction compared with the situation in European countries.

Proposals for new subsidies or tax credits for expansion in in-plant training raise serious practical and policy questions. Incidentally, experience with such devices in European countries has not been encouraging as Margaret Gordon's recent book indicates. Nevertheless, on-the-job training under the Manpower Development and Training Act in

the last two years seems to have been more "successful," at least in terms of relative numbers, than Weber seems to imply.

In criticizing the State Employment Services and the locally-selected training projects and trainees, perhaps one has an obligation to suggest ways of improving the functioning of our public Employment Service, especially from a national point of view, including the whole problem of interstate and interarea clearance. In discussing the manpower program in this country one can hardly avoid questions of coordination and integration, centralization and decentralization of functions, and national and local interests in training and labor supply.

Economics has much to contribute to the solution of such questions if we will rethink our conclusions in the light of the characteristics of various labor markets, the informational needs of different workers and employers, cost-benefit analyses of different government functions and programs in the manpower field, and foreign experience with manpower policies and programs. Economic and social research along those lines promises to pay off well in terms of policy decisions and program revisions.

JEROME M. ROSOW

Standard Oil Company (New Jersey)

Weber identifies two major problems of policy:

1. That government programs generally have failed to develop substantial *links* between training activities and employer requirements in the dominant sectors of the labor market.
2. A major deficiency of labor market information.

With respect to actions to overcome these weaknesses Weber suggests four things:

1. *Expansion of job training*—basically a self generating result of full employment. Here he notes that fear of inflation has limited growth of aggregate demand sufficient to liquidate unemployment.
2. A set of incentives for the employer including: direct subsidies, a tax credit on investment in training, a tax rebate on training programs, and an exemption from increased minimum wage for workers under 21.

3. Concentrated government action to collect "extensive" labor market information including current and long range trends.
4. The need for intensive counseling activities to overcome the *guidance gap* which blocks the effective entry of new job seekers and displaced workers.

He concludes by acknowledging the modest nature of his policy suggestions. If anything, it is this modesty which concerns me most.

1. The definition of "manpower Policy" (see p. 1) is stated quite broadly, yet narrowly confined to one sector—*government* and apparently the national government only. The dominant role of the federal government is beyond question. Yet this is an inherent limitation of scope and results. The definition should probably embrace education, government at all three levels (federal, state and local), business and industry, and non profit organizations concerned with labor market behavior.

The Harbison definition goes further in another necessary respect, namely, embracing "potential members" and introducing the concept of "utilization" which of course goes beyond *employment* as the final test of manpower policy effectiveness.

2. As Weber points out "manpower policy" has become a popular catch phrase not only in the government sector but in the private sector as well. Planning is no longer a political word tinged with fearful colors. The growth and size of the American economy has necessitated more and better planning over a longer time span. Capital decision making in the private sector is opening up "Corporate Planning" units which engage high talent who have ready access to policy makers. This in turn is pointing to the need for manpower policy planning to engage the human resources as a major ingredient of the business plan.

Here, it seems to me, lies a new found opportunity for government and business to reinforce each other in developing a more practical national manpower policy. In effect this is one of the key weaknesses Weber sees in the present mechanisms, namely, "the failure to develop substantial *links* between government training activities and employer requirements in dominant sectors of the labor market." This problem is really a mouthful. It lies at the root of all inherent problems whether we refer to the unskilled, semi-literate drop outs, or the college educated with graduate level degrees.

3. Manpower policies should relate to education policy and education policy should reflect national manpower plans. The duration of compulsory, free education now under discussion is really a piece of manpower policy. It is responsive to population change, the level of national income, the rising expectations of people, and the labor market itself. However, the costly time lags between seeing the problem and doing anything about it are partially the result of the separatism between education and labor in our society. Here we relate to entrance ages, vocational vs. general education, curriculum, career planning, vocational guidance, and bridging the ways from school to work. Then of course building bridges for movement back *from work to school*. This too is manpower policy—concern with the utilization and revitalization of mature manpower to overcome occupational obsolescence.
4. Manpower policy should fully exploit the use of financial incentives as Weber proposes. The Federal tax power represents a powerful instrument which can stimulate change in the private sector. Incentives can produce training, expansion, cyclical balancing, increased manpower mobility, and most important of all—experimentation. These experiments will reveal new found bases for the accommodation of manpower to technological change. I heartily endorse this proposal (despite Dick Lester's reservations).
5. Manpower policy needs to be stretched beyond the concept of employment. National policy should integrate programs which cover the young pre-employment age groups, the young ill-equipped problem groups, the mature employables, the older workers, and the retirement zone personnel. In other words the policy cannot function on one level with lasting effects—it must relate to all ages, all industries and all sectors. Job security and high productivity are compatible goals only to the extent that manpower policy visualizes and forecasts their inter-relationships.
6. Weber touches briefly upon the need for intensive counseling, presumably by the Employment Service. The *vocational guidance gap* is one of the serious weaknesses we face. Basically the education systems require a heavier investment of talent here and students require better and more meaningful guidance.

Communication between employers and educators should provide the healthy linkage whereby the 16 to 20 years of involvement in education can be translated into the evolving needs and job opportunities of the society. Long range manpower forecasts of government and business should feed back to educators and to the student body. The *potential* members of the labor force should be exposed to the outlook and to the reality of job content long before they make lifetime commitments. What proportion of the labor force is occupationally effective?

7. In summary, it seems to me that manpower experts are somewhat too patient, too apologetic and too modest to project the real importance of manpower policy to the national welfare. The heartening developments in economic planning and the growing public support here are harbingers of the opportunity to engage another dimension of planning in an equally important area—human resources. Those of us in the profession can enunciate broad, ambitious objectives and define goals which visualize manpower as one of the most vital forces in our society. 75 million people with the education, training and experience represent one of the greatest pools of accumulated wealth in the entire world. Human assets are unlike any other form of wealth. They can continue to appreciate, to grow and to create with age—whereas physical assets steadily depreciate with age. National manpower planning must move up to the highest councils of government, business and education and cannot hold second place to any endeavor.

MELVIN ROTHBAUM
University of Illinois

Professor Weber's background discussion suggests a preliminary comment on employment policy before proceeding to the manpower issues. In analyzing the contributions of manpower and general economic policies, most observers have credited recent reductions in the unemployment rate mainly to the government's monetary and fiscal efforts. But when high levels of employment and output (with their associated price pressures) result in neutral or deflationary fiscal and monetary policies, they see manpower programs becoming increasingly

important. By reducing bottlenecks in the labor supply, increasing individual productivity, and helping allocate workers to their most productive employments, manpower policy may not only support higher levels of growth and reduced price pressures but also the achievement of still lower levels of unemployment.

This view is essentially correct, but may slight the demand side of the picture because of the high level of aggregation at which the analysis takes place. As full employment nears, selective means of generating employment opportunities can be utilized, including regional, urban, and other programs aimed at particular subsectors of the economy. Such programs can be pursued even in the context of a fiscal policy that, overall, is deflationary. Thus there is no sharp breaking point at which demand-generating policies necessarily drop out, but rather varying combinations of demand and supply policies that are appropriate for achieving employment goals in differing periods. If Weber's comment on the politics of inflation is correct, then the use of selective demand policies in periods of high employment deserves more extensive and explicit analysis.

To get to the central theme of the paper, Weber has done a perceptive job of analyzing the trends, accomplishments, and structure of manpower policy. Many of his criticisms are well taken. The following comments raise questions about a few of his criticisms and pose one new issue.

STRUCTURE OF TRAINING PROGRAMS

Professor Weber describes the shifting emphasis in manpower programs from retraining displaced workers for specific jobs to a supply orientation—dealing with the needs of the disadvantaged, reorienting vocational education, and improving the operation of the labor market. This shift generally conforms to the OECD recommendation that the United States should attune its manpower programs more to economic growth and less to unemployment problems. Weber does not appear to be opposed to the trend itself, but rather to the fact that these programs are not geared closely enough to the labor market. To remedy this, he would pay more attention to on-the-job training (OJT) and less to institutional and multioccupational programs. While recognizing the problems associated with OJT, he believes that these can be overcome by exacting a *quid pro quo* “. . . in the form of standards governing the kinds of programs and most important, the characteristics of the persons who are encompassed by the training effort.”

In terms of public training costs and successful placement, this suggestion has much to recommend it. Unfortunately the substantial employer input in OJT programs makes it difficult to control the choice of candidates. Barring a very tight labor market, it is unlikely that monetary incentives will induce employers to accept less desirable trainees unless the incentives are so high that they will seriously exacerbate the windfall problem. If the labor market is very tight, training efforts will increase and hiring barriers fall without such incentives. It is precisely because institutional and multioccupational programs are costless to the employer that they can open doors to employment for those who otherwise would have been rejected.

This is not to argue against expanding OJT programs. Some excellent and exciting OJT projects have been nurtured under MDTA. It does support a more optimistic view of the payoffs from institutional and multioccupational training, particularly if they are geared more closely to labor market requirements. Studies showing that past training was predominantly on-the-job should not necessarily determine current manpower policy. Such training will always be of major importance, but experience in other countries as well as the reorientation and growth of our vocational training and community college systems may presage a different combination of training efforts in the future.

EARNINGS IN TRAINEE OCCUPATIONS

It is questionable whether the fact that trainee occupations often offer below-average earnings levels is a serious deficiency in the programs. In this case, we may be trying to eat our cake and have it, too. To insist that the training programs enlist the maximum number of disadvantaged individuals and, at the same time, that they be oriented toward higher-earnings occupations probably is unrealistic. To the extent that choices must be made between these goals, one can persuasively argue that helping those who need the help most is a reasonable priority.

Many of the current training programs are first steps for disadvantaged groups. Insofar as possible, these should be first steps on open-ended occupational ladders. But the pattern of available jobs and competition from better-qualified job seekers may limit the achievement of this goal. If the programs provide disadvantaged individuals with some occupational and social skills and put them into contact with the world of work, then they have accomplished a large part of their

objective. In the longer run, it may be desirable to devise supplementary and follow-up forms of training to permit more rapid vertical mobility for the initial trainees.

PUBLIC EMPLOYMENT SERVICE

Professor Weber's suggestion that the collection and dissemination of intensive and extensive labor market information be allocated between private and public organizations, respectively, raises some problems. There is little doubt that the public agency should be the main source of extensive labor market information. On the other hand, the employment service probably cannot perform its placement and other functions without a good deal of intensive information as well. Creating any hard and fast distinctions between extensive and intensive informational functions would pre-determine the larger question of the appropriate role of the employment service in terms of the occupational categories to be served. It is not at all clear that the public service should be limited to those occupations for which only extensive information is required. It may be that this decision will vary from labor market to labor market, depending on the depth of the market for various occupations and the adequacy with which such groups are being serviced. In addition, the division of labor in securing and publicizing labor market information may depend on the ease or difficulty of exchanging such information between public and private agencies—a subject that has received little investigation.

However, there is another problem not covered either in the paper or in public discussions that deserves consideration. With the establishment of the Neighborhood Youth Corps and the Job Corps, the employment service was called on for field support in the form of Youth Opportunity Centers. When the Secretary of Labor presented his report on older workers to Congress last summer, there were suggestions of special employment service facilities for older workers. Special services already exist for handicapped workers and other groups.

In short, each program creates pressures for specialized field support and this, in turn, creates the danger of fractionalizing the activities of the employment service. These specialized facilities often appear to flow more from their salability to Congress and from interagency competition than from the functional requirements of running an effective and efficient public employment agency.

Various kinds of specialization may be desirable. But distinctions

that may be useful in counseling, for example, may make little sense in placement. General distinctions on the basis of age are particularly dubious. The geographic location of employment service offices may be deficient in terms of their availability to lower income groups. But if this is the case, the deficiency relates to the whole range of workers in those areas and not just to youth. Specialized offices and services should not be frozen into the employment service structure on the basis of crash programs or the source of program funds. It is important that decisions to expand old or to add new programs be distinguished from the structural adjustments required to implement such changes. To achieve flexibility in the face of changing labor market requirements, the general rule should be to maintain the maximum feasible unity of employment service functions. Departures from the rule should be based on clear evidence that the specialization will substantially increase the efficiency with which the service can meet the needs of an important and continuing part of its clientele.

III

**CURRENT STATUS
OF MANAGEMENT RESEARCH**

Leonard Sayles, Chairman

THE MANAGER AS A LEARNER

WILLIAM R. DILL

IBM Corporation

There was also a Beaver that paced on the deck
Or would sit making lace in the bow,
And had often (the Bellman said) saved them from wreck,
Though none of the sailors knew how.

—Lewis Carroll, "The Hunting of the Snark"

The manager's contribution to an organization, like the Beaver's to his ship, is hard to observe and harder to assess. When we fail, as I believe we have failed, to understand important facets of his job, the research we do about management is limited in scope and relevance. So far we have described the manager mainly as the administrator of an on-going enterprise or as the leader who applies his wisdom, courage, and political skill to induce and to channel change. We have studied how he performs, how he leads, and how he relates to others inside and outside his organization. In the role of leader and decision-maker we know him well.

We have seldom asked, though, how he acquires his wisdom and skill or about how he helps others to build theirs. However popular an emphasis on learning has been in commencement speeches by company presidents, it is only now becoming a focus for research. Studies of management and of organizational processes need to look more at how managers learn and at how they structure organizational systems so that others around them learn.

The limited amount of work that has been done does not reflect the importance of education to modern organizations. Within IBM, for example, large groups of employees will spend more than one month out of twelve during 1966 in the classroom and will spend substantial parts of the remaining eleven months helping in turn to transmit new knowledge and skills to other employees and to customers. A significant portion of higher management within the company have worked for at least a few years during their careers as full-time educators, and as time goes by, the proportion with this kind of experience is more likely to increase than to decrease. Yet for all that IBM is doing, my continuing concern is whether we are doing enough and whether we can find ways through classroom programs and resources for self instruction to improve men's capacity for educating themselves.

As our organizations become larger and more complex and as the pace of technological and social change increases, the issue of when we train people, how we train them, and where we train them is no longer simply the concern of a few professionals in employee development. Policies about education, both to update and to improve employee skills, are as critical to good employee relations as pay, hours of work, and the other benefits that IRRA is fond of talking about.

Yet where do we turn for guidance to develop and test policies that might encourage learning within industrial and governmental organizations? In the profusion of theories and empirical findings about organizational processes and about individual and group behavior within organizations, little is said about learning. Instead, effectiveness, efficiency, motivation, and openness to change are the key topics; and what these theories stress as considerations in organizational design may sometimes detract from the establishment of effective climates in which to learn.

A first line of research has been concerned primarily with the maintenance of stability and control in organizations. We assume that objectives have been set, perhaps by bargaining or consensus, perhaps by the privileged voice of an owner or a senior manager. We study the ways in which people channel their behavior toward the achievement of the objectives, or if pathologically inclined, we study the things that divert them from the pursuit of established goals. Problems of coordination and control, of formal vs. informal functioning, and of centralization and decentralization have been at the heart of most of our classical and modern analysis of organizational behavior. The focus is on how jobs get done, not on how a system learns which jobs are important to do.

A second theme in organizational research is efficiency in the pursuit of goals. Engineers and economists from Adam Smith and Frederick Taylor to modern practitioners of operations research have asked how to get more from the human and capital resources that an organization invests. Behavioral theorists like Barnard, Cyert, Lindblom, March, and Simon have clarified the barriers of limited foresight, imperfect communications, and human "cussedness" that limit the degree of efficiency which can be achieved. Even theorists like Argyris and McGregor who champion the individual against the organization are concerned with efficiency—in their case the extent to which organiza-

tions allow men within them to achieve the fullest measure of satisfaction and self-realization.

An emphasis on efficiency as the engineer and economist define it often rewards short-term results at the expense of long-term learning and growth. An emphasis on efficiency as psychological self-realization has more to do with learning, but it divorces an individual's self-fulfillment unrealistically from the development he does for the sake of his organization and his society.

Learning activities are also largely ignored in studies which are concerned with motivation—with the "human relationships" whose complexities keep societies like IRRA in business and whose qualities determine whether a company is a satisfying place to work. The usual incentives which motivational theories cover are, as March and Simon's classification suggests,¹ either incentives to participate in the life of an organization or incentives to produce—not incentives to explore or to grow.

The line of research which most nearly touches problems and processes of learning concentrates on organizational change. But again, these studies ask little about how the need for change is recognized. We assume that the basic knowledge and experience that managers and their subordinates must have to discover problems and formulate solutions exist among them. Under the guise of an interest in "creativity," we look for ways to encourage a freer exchange of existing knowledge and experience among the people who share responsibility for decisions; and under the guise of "overcoming resistance to change," we seek ways to sell and implement ideas which influential members of the organization agree are good.

Studies of change, like the other main approaches to research on organizations, are not yet geared to today's world. Survival for a company or a government agency now depends on its ability to discover new missions and to bring new knowledge, new talents, and new skill in from outside. Survival for an individual, manager or employee, requires an ability to adjust to abrupt and sometime unpredictable changes in job activities during a lifetime of work. Research needs to ask how we expand the reserves of knowledge and skill which an organization or its members can use in moving into new environments. It should also help us define the social processes which accompany a

¹ James G. March and Herbert A. Simon, *Organizations*. New York: Wiley, 1958), ch. 3 and 4.

reorientation of organizational priorities from performing toward learning.

Only a few theories look directly at organizational learning. These are mainly theories of adaptation, rather than theories of exploration. They examine short-range rather than long-range behavior, and they stress responsive rather than anticipatory, searching patterns of behavior.

The common element of these theories is that learning is a response to stress within the organization. The individual adapts because he is uncomfortable when confronted by uncertainty and complexity. He and the groups to which he belongs feel performance stress as they measure achieved results against goals and incentives that they or the organization have established. The amount and the timing of learning is a complex function of aspirations, accomplishments, and the relative importance of achieving success or avoiding failure. Groups learn by observing differences between their course of development and the development of other groups, and as a result of what some have called disjunctive stress, acting to bring themselves back in line.²

We need to know more, though, than that learning is associated with stress. If, for example, stress is the main precondition, what kinds of stress will produce exploratory and developmental responses, rather than anxiety and withdrawal? How do managers control the production and distribution of stress in order to facilitate kinds of learning which will be most valuable for the organization? Whose behavior is held up as a model to induce stress?

In many businesses, to illustrate the question, it is fashionable to look toward senior levels of management for guidance about what to learn, while in at least some universities there is a belief that the important models are not older, but younger—the graduate students and young faculty members who bring fresh ideas and standards into the system. The businessman sometimes seems to go out of his way to assure subordinates that his job is not primarily intellectual in nature, with a result that reading and seminars are undervalued as modes of learning. In the university, there is an opposite tendency to glorify pure intellectual approaches at the expense of learning which can better be done by involvement in the “real world.”

²For a review of major theories of organizational learning, see Vincent E. Cangelosi and William R. Dill, “Organizational Learning: Observations toward a Theory,” *Administrative Science Quarterly*, Vol. 10 (Sept. 1965), pp. 175–203.

The study of how organizations learn involves interesting issues of politics, economics, and engineering. Politically, what is the appropriate role for management development and training departments? Do such groups exist as staff units to transform the wishes of current top management into programs of education for younger men, or is theirs a subversive role to train younger men in things which their predecessors felt no need or no desire to learn? If continuing education is important in business and in government, development and training personnel probably must find ways to assert more influence in decisions about organizational design, career paths for employees, and the allocation of company resources.

From an economic point of view, it used to be cheaper to buy skill than to grow it. Now with a shortage of trained talent and a demand for competence in areas where few have had an opportunity to learn by experience, industry must rely less on an open market. Companies must weigh the costs of internal training and development against the costs of sharing with other groups in society the strengthening of community education facilities.

Business also used to worry less about unused talent in society. The waste of human resources was seen as unfortunate, but inevitable. With changing social attitudes and large commitments of welfare aid to the poor, whether they work or not, the costs of training to help men get and keep jobs are weighed by revised standards against the costs of leaving the untrained to live on the public dole.

From the standpoint of engineering and organizational design, we are now in a position to consider new forms of organization, designed specifically to promote learning as well as performance. The modern divisionalized, decentralized corporation—despite the reception given to recent books by Chandler and Sloan³—does not represent an ultimate approach to managing. The opportunity lies ahead to examine information resources and information processing within organizations and their environments in the same way that we have studied incentives and interpersonal relationships. Studies of how people get and use information are gaining in prominence. Computers are being used to provide a basis for new kinds of information and decision networks and, by their capacity for representing the company and its environment

³A. P. Chandler, Jr. *Strategy and Structure* (Cambridge; MIT Press 1962); Alfred P. Sloan, *My Years With General Motors* (N.Y. Doubleday, 1964).

through simulation models, to discipline the manager to explore and test ideas more thoroughly before reaching conclusions.

At the organizational level, then, there are many ways in which research might give more attention to processes of learning. At the individual level, we fare somewhat better. Our theories of the manager as a decision maker contain many of the ingredients we need to understand why and how he learns. Particularly in the theories of Simon and his colleagues, decision making behavior is described as adaptive behavior. Of the root concepts—levels of aspiration, limits on attention and perception, risk-avoidance, sequential and limited exploration of the environment, dependence on past experience and on the judgments of associates—many come directly from psychological theories of learning and problem solving.

Yet despite their origins, descriptions of the manager as decision maker fall short of describing the manager as a learner. Theories of decision making assume that decision making is the most important thing that a manager does. In most settings, including universities, learning does not have such high priority. Conditioned by the educational system to emphasize action on well-structured tasks, managers are more inclined to perform than to explore. Learning is something that many of them hope they accomplish unconsciously "by experience." Otherwise, it is something that they do on their own time or in compartmentalized programs away from the job. It is an activity for which they do not usually expect organizational encouragement and support.

Research on managers as decision makers also largely ignores their position in a career span. Very few studies of decision making look at the manager as a man of a particular age, with his own life interests and career goals and a host of outside commitments. In a sense we know more about the general life setting of the worker than we do about the manager's. Age in itself may not be a critical variable since, for in the range that concerns us in looking at managers, age has no direct link with the *capacity* to learn. On the other hand, with age go predictable variations in a man's relation to wife, parents, and children; in his leisure time activities; and in his involvement in community and professional organizations. These variations may not have much effect on the ways in which managers approach a decision to build a new factory, but they may well have a great deal of influence on the ability or willingness to take time out to master a new field of knowledge or to practice a different kind of skill.

To the extent that learning is a reflective activity that goes on when men are evaluating decisions and reviewing results, the study of learning concerns behavior *between* rather than *during* decision sequences. It requires data from managers about what they do during periods of time when, for a study of decision making, we might release them from observation.

Finally, there are new resources for learning as well as for decision making. Mid-career education has been a growing business within companies, government agencies, and universities since World War II; yet few comprehensive studies of its effectiveness have been undertaken. We have experimented with a variety of new approaches to classroom education and to self-instruction, ranging from conceptual packages like sensitivity training and courses in problem solving to hardware-based approaches such as management games and computer aided instruction. We have in the work of people like Bruner and Newell and Simon⁴ who have turned their attention to higher-level learning processes, a framework for understanding better how men learn from experimentation and experience and how, for training purposes, we might more effectively structure what managers live through.

More emphasis on processes of learning is undoubtedly only one of the new directions we might set for management research. I could suggest others, but not any that I believe is more important. Discussions of human obsolescence in modern society often bog down with an assumption that managers and employees are unwilling to learn or that because of age, they are unable to learn. These are largely false assumptions. Too often at a time when encouragement would do some good, men in organizations are not given any incentives to invest in expanding their knowledge and understanding. Too often when they recognize a need and show some motivation, the resources that would help them grow from the base of what they already have learned and have experienced are not available. The individual manager must seek for himself and for those he supervises ways of strengthening their confidence and incentives to learn and ways to improve the cognitive strategies and information resources on which they can draw. In designing and maintaining organizational systems, the manager must balance the ever-important stress on arrangements which will contribute to

⁴ Jerome S. Bruner, *On Knowing* (Cambridge; Belknap Press, 1964); Allen Newell and Herbert A. Simon, "GPS, A Program that Simulates Human Thought," in *Computers and Thought*, Edward A. Feigenbaum and Julian A. Feldman, eds. (New York: McGraw Hill, 1963), pp. 279-296.

short-term effectiveness and efficiency with arrangements that will allow for long-term flexibility and growth.

The manager, in short, needs the working conditions and the skills in diagnosing and interpreting his environment that we as researchers have always thought we possessed. It will be an interesting test of our own capacity for growth to see what help we can provide.

MANAGERS—AN IMPROPER SUBJECT FOR THE STUDY OF MANAGEMENT

FRED H. GOLDNER
Columbia University

Social scientists who have studied the management of business organizations have concentrated on the study of individual managers and their interpersonal relations to the exclusion of other aspects of management. They have, thus, obscured the more important relationships that occur among the groups composing these organizations. This concentration also leads them to miss the drastic changes now occurring in management and organizational structure.

GROUP INTERACTION IN MANAGEMENT

Most managerial studies evidently assumed that management consisted of supervising subordinates within a purely hierarchical organization. We have, consequently, large amounts of data on first-line supervisors and on the problems of leadership. However, this assumption was never completely true and is even less true today.

Most studies of the relations between the first-line manager and his subordinates ignored the relations of the manager with those above and alongside him. Some of the studies that focused on the manager's role did indicate the marginality of his position but this was ignored by those who tried to discover leadership traits or by those who attempted to compare authoritarian and participative managers. They evidently assumed all managers to be equally competent and ignored a major problem of each manager—the management of his own career.

In recent years there has finally been a shift to the study of horizontal relations in management.¹ Even here, however, there is danger of concentrating on the horizontal relations between individuals as individuals. For example, the new training fad for managers—"sensitivity training"—deals with the interpersonal relations of the individual and ignores the group contexts in which interaction occurs.

When we shift from studies of the relations between managers and

¹ See: Henry A. Landsberger, "The Horizontal Dimension in Bureaucracy," *Administrative Science Quarterly*, Vol. 6 (1961), pp. 298-332; Leonard R. Sayles, *Managerial Behavior* (New York: McGraw-Hill, 1964); George Strauss, "Tactics of Lateral Relationship: The Purchasing Agent," *Administrative Science Quarterly*, Vol. 7 (1962), pp. 161-186.

subordinates to those among managers there needs to be an accompanying shift from a discussion of relations between individual persons to one of the relationships between organizational units. In the vertical relationship men interact as individuals. In horizontal relations the crucial interactions are between units, or between men representing their respective units.

I do not deny the existence of units in vertical relations but in horizontal relations unit interactions are more encompassing. To make this point I have probably overstated the individual nature of vertical relations. Most of the studies of first-line managerial leadership ignored unions and the inevitable group context of relations between the union member and his manager.

The distinguishing characteristic of the concept of organization is that it involves a division of labor. And the division is in terms of units or sub-groups of the organization. This point is certainly not new with me. Barnard long ago made the point that the "concrete stage of specialization is the unit organization rather than the specialized individual."²

In any complex business organization it is almost impossible to cut the division of labor clearly. Responsibilities will overlap and units with divisive interests must interact. Unit members develop common perspectives through shared experiences and common problems. Individuals categorize each other according to the kinds of groups to which they belong. When organizational members interact with each other they do so in terms of these perspectives, identifications, and categorizations.

Again, these are not new ideas but are underdeveloped in the study of business organizations. Over twenty years ago Selznick studied intergroup relations in government administration.³ Blau, also with the government, has reported on the effects of group contexts on interpersonal relations.⁴

The importance of intergroup relations within a business organization is indicated by survey data obtained from an ongoing study of executive achievement sponsored by the Russell Sage Foundation. The

² Chester I. Barnard, *The Functions of the Executive* (Cambridge: Harvard University Press, 1956), p. 136.

³ Philip Selznick, *TVA and the Grass Roots* (Berkeley: University of California Press, 1953).

⁴ Peter M. Blau, *The Dynamics of Bureaucracy* (Chicago: University of Chicago Press, 1963).

survey was of sixty executives in a large American corporation. The respondents were presented with a number of possible ways of behaving in their day-to-day relationship with their organization. They were then able to indicate yes or no as to whether they thought they should behave as stated and whether they actually did so behave. All the proposed behavioral situations except one posited a choice between the organization and the respondent's personal and individual interests. The exception contrasted the organization to the respondent's identification with his sub-unit. The discrepancy between what the respondents actually did and how they thought they should behave was greater on the choice between the organization and their unit than any of the items between the organization and their personal interests. Seventy-six per cent answered that they definitely should do this to the item: "Always place the organization's interests ahead of my department or unit." Only twenty-six per cent said that they definitely do it.

Interpersonal relations across unit lines involve individuals acting as representatives of their groups. We recognize in international relations how group interactions are affected by the internal relations within each of the groups. We thus analyze U.S.-U.S.S.R. relations in terms of the internal problems of each country at any moment in time. Negotiation "feelers" over Vietnam may be rejected because they come during one of our election campaigns. We have also acknowledged that the internal problems of each side influence union-management bargaining. This perspective has not yet been employed in studying management organizations.

Organizational units as well as the containing organization frequently exist for their own sake—the survival of the unit supersedes that of any individual in it. I have sat in meetings of members of a unit where the only business was the furtherance of the unit as such.

The careers of managers are tied to their organizational units. They perceive their past, present, and especially future in terms of membership in their units. I would even contend that the boundaries of some groups are defined by the career line in an organization.⁵

Why has more work not been done on group relations? For example, despite my polemical tone I am now finishing a paper on emergent roles—not emergent units.

⁵ For an exposition of this argument see: Fred H. Goldner, "Industrial Relations and the Organization of Management," unpublished Ph.D. dissertation (University of California, Berkeley, 1961).

Psychologists have worked in business organizations for a long time. They have naturally studied the individual manager and have tried to discover the attributes of the successful manager. They have developed tests of all kinds as well as training procedures. However, there have been few sociologists in business organizations. And of those sociologists who have studied management, most, ironically, have concentrated on using role theory.

Our society is oriented to psychological rather than sociological explanations. And even with sociologists it is much easier to fall back on the familiarity of the role concept than to develop the new concepts needed to handle complex organizational inter-relations. As March and Simon pointed out, bargaining among organizational units acknowledges a heterogeneity of goals—which is a threat to most organizations. Hence most conflict will be perceived as if it were individual.⁶

But most of all, it is easier to study individual managers. The concepts are easier and more available, and the information is easier to come by. Individuals are freer to discuss their personal conflicts and secrets than they are to discuss those of their units and thereby threaten other members. Access is also easier. For example, studying manager-worker relations in the context of unions was hindered by the difficulty of getting the concurrent approval of both the union and management. This very difficulty should have made clear the crucial nature of inter-group relations.

CHANGES IN THE STRUCTURE OF MANAGEMENT

All of the above is a prelude to the argument that major changes are occurring in business organizations and that we will not notice these changes if we continue to study only individual managers.

First, the very meaning of management is breaking down. Management is a dialectical term that has been understood only with reference to the members of the work force. It was a useful concept because it clearly distinguished those who ran the organization from those who performed its physical tasks. However, this latter group is becoming an increasingly smaller percentage within the organization. More importantly, managers have become so numerous that they constitute a work force of their own.

Secondly, as managers become a work force it has become necessary

⁶ James G. March and Herbert A. Simon, *Organizations* (New York: John Wiley & Sons, 1958), p. 131.

to treat them as a category and not as individuals. The organization had had to create a bureaucratic set of rules in order to treat managers by standardized procedures. Managers have simply become employees. The distinctions formerly conveyed by the meaning of management no longer hold.

Bureaucratic rules and standardized procedures call forth appeals from the application of these rules. The blue collar worker had a grievance procedure to handle his protests. The organization not only does not have a system of jurisprudence to handle managerial protest but such protest is still considered illegitimate although that illegitimacy was based on a completely different kind of organization. For example, in the past the first-line manager came from the ranks and entered management at the end of his career. It was natural for him to use the group he had left, and whose style of life he shared, as a basis of comparison. It was a comparison that favorably disposed him to the organization. Now, most managers are college graduates who start in management and only have those above them to whom to compare themselves.

Thirdly, then, there are many new occupational work groups coming into the business organization. They are all college educated and consider themselves to be professionals. Unlike past work forces, they deal with ideas and not their hands. The organization requires a different kind of commitment from them than it did from manual workers. A withdrawal of effort on their part is much less visible.

We know much too little about changes in the composition of organizational members and about the effects of these changes. For example, in a study of the middle management of a large American corporation I obtained the following data. The percentage of managers who hold college degrees was 41% for those who had been hired prior to 1948. For those hired between 1948 and 1957 it was 85% and for those hired between 1958 and 1963 it was 99%. For these same hiring periods the percentage of managers who answered "yes" to the question "are you a professional" went from 35% to 64% to 93%.

Increased specialization and the continuing process of rationalization has also led to the proliferation of functional groups within the organization. Decision-making has not only expanded vertically but also horizontally. For example, there are now departments of operations research and financial planning. The latter is even divided into one group responsible for "next year" and another responsible for long-

range planning. This has led to the disappearance of a single line of authority that goes from the top to the bottom of the organization. With production no longer the main problem area, the line cannot be anchored with the production work force. An example of this complexity is offered by the studies of Russian industry done by Granick and Berliner.⁷

The position of the corporation in society has also changed. It has lost the basis of its legitimation. The split between ownership and management popularized over 30 years ago by Berle and Means⁸ is just now starting to have effects on the relationship of the business organization to society.⁹

The basis of the legitimation of higher management is also being called into question within the organization.

The proliferation of functional and occupational groups along with the breakdown of any simple line of authority have led to organizations characterized by a shifting coalition of sub-units engaged in varying degrees of accommodation and conflict. Many organizations have become pluralistic multi-goal institutions with sub-unit goals derived from their functions and from their nature as self-perpetuating units.

Arguments over managements' prerogatives are irrelevant in these kinds of conflicts. There was no real problem of the legitimacy of rule over the blue collar work force. The rights of the members of the new work force—experts with decision making power and access to information—are uncertain. A system of jurisprudence is needed not just to administer the rules that govern the organization, but to legitimate them. For example, the organization cannot long permit each manager to be omnipotent to the managers below him, for they are all employees together.

The lower level member of management may feel just as much part of the organization as the higher one. The lower member may feel just as closely identified with a set of goals and may legitimately feel he knows what is good for the organization better than does his

⁷ David Granick, *Management of the Industrial Firm in the U.S.S.R.* (New York: Columbia University Press, 1954). Joseph S. Berliner, *Factory and Manager in the U.S.S.R.* (Cambridge: Harvard University Press, 1957).

⁸ Adolf A. Berle and Gardner C. Means, *The Modern Corporation and Private Property* (New York: The Macmillan Company, 1934).

⁹ For a discussion of the problems of corporate legitimation and its effects on society see: Fred H. Goldner, "La grande entreprise dans la société," *Sociologie du travail*, 4, 1965, pp. 337-349.

superior. It is difficult to document this because a number of organizational myths about authority continue to be promulgated although they may be ignored in behavior. However, I can point to evidence that subordinates—whole sub-units, in fact—bootleg work. And they do this to advance the organization and not for personal interests. They also actively control information that flows upward in the organization in order to aid the organization (by protecting it from the actions of superiors) as well as protect and advance their own careers.

SUMMARY

We have ignored, for too long, the group nature of business organizations. There are different kinds of organizational structures that permit or are created by different degrees of individual and group actions in organization. We need to know more about these relationships. There are different kinds of inter-group relations just as there are different kinds of interpersonal relations. We need to know more about them and their effects on organizations.

But most important our business organizations are changing to new forms that we can only begin to guess at. We are too dependent on concepts that were developed to understand past organizational forms. The continued use of these concepts only obscures what is happening. We need new concepts to understand the contemporary work force as well as the new kinds of relationships within organizations.

DISCUSSION

GEORGE STRAUSS

University of California, Berkeley

Let me say a few words about recent trends in management research and thus put in context these two excellent papers.

Among the many different ways of categorizing management research we may distinguish between those concerned primarily with relationships among *people* and those more interested in the impact of *structure* and *technology*.

With significant exceptions, members of the first group, who are concerned primarily with the relationships among managers as people, tend to ignore technology and structure. They seem to assume that a study which may be meaningful in one context—say a pajama factory in Appalachia—will be useful in all other contexts—say the Army. As far as some are concerned, greater participation and T group training are the sovereign remedies for all management ills.

Members of the second group start with an analysis of the impact of structure and technology. Some seem to be more concerned with specifying the types of managerial behavior appropriate to various forms of technologies—and thus help people adjust to their environment. Others prefer to change the environment itself to make it more consistent with the needs of people. In any case there is increasing evidence that studies of management are somewhat irrelevant unless they take into account the environments within which managers perform.

If we do concentrate on structure what do we find? First let us look at vertical, boss-subordinate relations. In the past those concerned with this area have sought to describe various sorts of management styles and hopefully to find the one which will be most conducive to high subordinate morale and productivity. A large number of factors have been considered: “consideration,” “initiating structure,” “employee vs. task orientation,” “authoritarian vs. non-authoritarian” leadership, among others. The relationship among these various indices of supervisory behavior is still far from clear, in part because of the wide variety of measuring techniques used. Some argue that these are all aspects of one central dimension of “autocracy-democracy,” with McGregor’s Theory X illustrating one end of the continuum and Theory Y the other, and further with Theory Y being clearly superior.

My hunch is that when the smoke clears we will find this an oversimplification and that at least two dimensions will stand out—and probably more. The first is a dimension of the boss's concern for his employees, his friendliness, fairness, willingness to help them, listen to them and keep them informed. This has been called an index of social distance, though it might describe paternalism just as well. It is far from an unambiguous dimension, however; for instance, perceptions of what is "fair" may differ greatly among groups in different technologies and cultures.

The second dimension is that of closeness of supervision, the extent to which the boss restricts the subordinate's freedom by issuing frequent orders. Close supervision, it is argued, inhibits individual growth, while general supervision helps provide the conditions for self-actualization. Yet the tightness of the boss's supervision is hardly the only determinant of the subordinate's degree of freedom. The foreman on the assembly line may give very few orders, yet the worker gets little opportunity to self-actualize. Delegation in the context of the office clerk means something very different from delegation in the context of the vice president.

All this suggests two conclusions regarding boss-subordinate relations: (1) Technology and structure set relatively narrow limits on the boss's freedom to adopt various leadership styles—a production foreman just can't behave like a college dean. And (2) technology, structure, and cultural conditions also influence how subordinates react to any given style of supervision—even if the production foreman and the college dean could behave identically, their subordinates would not react in the same way. So we should abandon any effort to find a single, all purpose best style of leadership which will be equally good in contexts. And we should give up trying to find a single dimension, such as autocracy-democracy, by which management may be measured.

Now let us look at lateral relations which are receiving increasing attention from students of management for a number of reasons: the growth in size and status of staff groups, such as purchasing, engineering, and accounting (so at times the staff seems to be the tail which is wagging the dog); the impact of highly complex defense and space projects whose protean interrelationships can best be understood not in terms of traditional organization charts but in terms of matrices or systems theories; the mounting aspirations toward professionalism on the part of many functional groups; and finally sheer dissatisfaction

with the classical and neo-classical analysis of staff-line relationships.

As yet our study of lateral relations is largely at the stage of taxonomy, of categorizing different kinds of relationships. Sayles suggests this be done in terms of work or paper flow and he identifies seven kinds of flows; others, doubtless, will suggest different approaches. But it is already quite clear that lateral frictions are a consequence of a lot more than personality differences. They arise out of the inherent requirements of the various jobs and the training required for them. To take a few stereotypes which may be disproved by research: Advertising men have high flown ideas while accountants have more earthy ideas of saving money; engineers think of abstract, logical, even absolutist terms, while personnel men are more prone to compromise. Differences such as these may be reduced by structural change, but one wonders how much T group training will help.

Matters are further complicated by the desire of many groups to be treated as professionals or at least semi-professionals. In claiming to be professionals such groups seek the right to have final say in their areas of professional competence without "lay" interferences (even by their nominal bosses), to be evaluated only by fellow professionals, to exclude "non-professional standards of ethics" which may conflict with their employer's directives.

So, as Goldner suggests, the picture of the organization which is evolving is very different from that presented by many organizational theorists. It is not a highly coordinated monolith, tightly controlled by top management. Rather it is a series of semi-autonomous departments—each with interests and viewpoints of its own—which keep each other in line through a series of checks and balances. Despite the centralizing impact of the computer, there is considerable evidence of what might be called "lateral decentralization" or "organizational pluralism." On the surface, at least, this seems to be a highly inefficient way of doing things. Decisions seem to be made largely on the basis of pressure politics and implicit bargaining, and there is no one department to bear the final responsibility. Certainly a case can be made for a unified systems approach which would take all the variables into account.

Inefficient as it may seem, perhaps the system of checks and balances has its virtues in the industrial scene just as it does in the national state. Special interests do require lobbyists if a balanced point of view is to prevail. The restricted "professional" viewpoint tends to counterbalance the excessive conformity and rigidity of "organization man."

Interdepartmental conflicts encourage free competition of new ideas (as well as giving top management a chance to evaluate subordinate's behavior). Since each department has only a partial picture of the organization's needs, competition improves the quality of each department's thinking and forces it to take the other departments' point of view into consideration. In a large organization such internal competition tends to substitute for the external competition of the market. And "jurisdictional disputes are an important means of bringing to the top administrator significant issues of policy, and of preventing these from being decided at lower levels without his knowledge." *

Dill's paper is consistent with much of this. Notice he recognizes that management involves more than getting along with people. In addition he is concerned with the structural impacts of learning. Learning for him occurs on the job, throughout a man's career—with only a small proportion of learning occurring in short classes away from the job. Further both Dill and Goldner recognize that groups can learn, in some ways just as individuals do.

To conclude: both papers make exciting contributions because they move us away from our traditional focus on face-to-face relations occurring over short periods of time. Also they suggest bridges among such disparate viewpoints as classical organizations theory, human relations, and the Carnegie Tech emphasis on decision-making.

* Herbert Simon, *Administrative Behavior* (New York: MacMillan, 1945), p. 145.

IV

THE UNION AS AN ORGANIZATION

Marten Estey, Chairman

INDIVIDUAL JOB RIGHTS AND UNION FUNCTIONS: Compatible or Conflicting Forces*

BERNARD SAMOFF

National Labor Relations Board

Growing public concern since World War II with protection of individual rights is reflected in Congressional, administrative and judicial action intended to insulate workers' job rights from union control. "Employment man" is separated from "union man"; workers occupy a dual status, first as employees guaranteed a "constitutional" right to work, and second, as voluntary union members required only to tender fees and dues as a condition of employment, and free to be "good, bad, or indifferent" members.¹

Individual job rights are legally safeguarded by Sections 8(b)(2) and 8(a)(3) of the LMRA, as well as a swelling number of Federal and State court decisions protecting workers' jobs from union and/or employer control. Less well recognized are forces intensifying the individualism in jobs endowed with expanding tangible benefits through collective bargaining. The strong motivating drive among American workers (and all Americans) for individual success, the tendency of our social system to emphasize self-development² and detailed rules governing the employment relationship contribute unremitting pressures for making jobs personal property.

As these forces push for individual protection from union power, other forces press upon unions. Members insist that unions continually expand employment benefits, guarantee these job-connected assets, and insulate them from the vagaries of the impersonal market. Indeed, members want walls around their job rights to ward off competition. Among other union pressures are institutional survival, legal accountability and society's demands both in narrow terms in the establishment of acceptable wages, hours and working conditions and in broad terms to maintain the economic health of the nation.

* This is a revised and shorter version of a paper delivered by Bernard Samoff, Regional Director, NLRB, Philadelphia, at the IRRA, New York City, December, 1965. The views expressed herein are my own and should not be taken as the official pronouncements of either the NLRB or its General Counsel.

¹ *Radio Officers v. N.L.R.B.*, 347 U. S. 17 (1954), 40.

² Seymour Martin Lipset, "Trade Unions and Social Structure: I," *Industrial Relations*, Vol. 1 (October 1961), pp. 75-89.

There are two forces affecting both individual job rights and unions' functions. Sometimes it appears as if safeguarding job rights is the supreme goal. Union functions are deemed relatively unimportant and frequently subordinated to the rights of jobholders. Whatever the reasons and however valid, their mutuality or clash is a reality which cannot be ignored.

That job rights and union functions conflict within unions requires no documentation. Little understood is the union's role as a broker among its members with competing interests. Mostly, unions reconcile these without involving the employer or community. But when they do not, workers seek outside aid. Where should the line be drawn between workers' interests and unions' functions? This is the key question.³

Presented briefly here are four approaches for dealing with the confrontation between job rights and union functions, classified as follows: (1) individual job rights (IJR) superior to union functions (UF); (2) IJR subordinate to UF; (3) IJR and UF accommodated; and (4) IJR and UF segregated in utility-type unions.

Data comes from relevant literature, personal study⁴ and a quarter-century experience in labor-management relations. The views of writers will be expressed in abbreviated and sharp terms, even though they do not necessarily fit into absolute categories and their writings contain reservations and qualifications.

This paper will not cover workers' liberties, union democracy, union admission policies and union security. It focuses upon local unions, not intermediate bodies or national unions. It singles out IJR and UF in a kind of dialectic to explore ways for handling the conflict.

IJR AND UF

Bearing in mind the limitations of any definition, I suggest this for IJR: Legally enforceable individual benefits flowing from the prospective employment or employment relationship. It implies a set of fixed yet expanding rules governing employment, links the worker, union and employer, and includes "uniquely personal" provisions in labor agreements, arbitration awards, court decisions, company handbooks and those union bylaws accepted by the employer. IJR also

³ "The Individual's Legal Rights as an Employee," *Monthly Labor Review*, Vol. 86 (June 1963), pp. 666-673.

⁴ Unpublished Ph.D. dissertation in Political Science, University of Pennsylvania, May 1963, and "The Impact of Taft-Hartley Job Discrimination Victories," *Industrial Relations*, Vol. 4 (May 1965), pp. 77-94.

encompass informal work rules and practices customarily governing employment and apply to job applicants and employees and may persist and survive even though formal employer-employee relations are severed.⁵

Turning to the functions of unions, we find quite a miscellany. Archibald Cox identifies these: (1) substituting group economic power for individual weakness; (2) securing some job security; (3) extending the rule of law to industrial relations; and (4) enabling workers to participate in government of their industrial lives through their own representatives.⁶ George W. Taylor emphasizes these union functions: "to discern, reconcile, and then represent the diverse and often conflicting demands and interests of its members and, indeed, even the interests of nonmembers in a bargaining unit. . ."⁷

For some writers all of unionism may be considered functional. Jack Barbash observes that the union ". . . serves a function not a mission for the rank and file and in principle this is good."⁸ And although expressed some four decades ago, Hoxie's "functional unionism" is still meaningful. "From the standpoint of motives and ends as well as from that of its character and significance . . . the real unionism—its primary and essential expression—is functional."⁹

I use "function" to mean a requisite set of activities inherent in union structure, namely, reflecting, reconciling and representing workers' needs (three R's). The latter and establishment of formal rules gov-

⁵ Particularly helpful in analyzing this concept are the following: John Perry Horlacher, "Employee Job Rights versus Employer Job Control: The Arbitrator's Choice," in *Collective Bargaining and the Arbitrator's Role*, Mark L. Kahn, ed., (Washington: BNA, Inc., 1962), pp. 165-196; William Gomberg, "The Work Rules and Work Practices Problem," *IRRA Proceedings* (May 4-5, 1961), pp. 643-654; same, "Featherbedding: An Assertion of Property Rights," *The Annals*, Vol. 333 (January 1961), pp. 119-129; Solomon Barkin, "Labor Unions and Workers' Rights in Jobs," in *Industrial Conflict*, Arthur Kornhauser, Robert Dubin, and Arthur M. Ross, eds. (New York: McGraw-Hill, 1954), pp. 121-131. "Like many other observers," write Philip Selznick and Howard Vollmer, "we are impressed by the convergence of a number of powerful forces tending to produce a system of rules . . . protecting job rights of employees." "Rule of Law in Industry: Seniority Rights," *Industrial Relations*, Vol. 1 (May 1962), pp. 97-116.

⁶ "The Role of Law in Preserving Union Democracy," in *Labor in a Free Society*, Michael Harrington and Paul Jacobs, ed., (Berkeley: University of California Press, 1959), pp. 45-87.

⁷ "The Role of Unions in a Democratic Society," in *Government Regulation of Internal Union Affairs Affecting the Rights of Members*, Senate, Subcommittee on Labor, 85th Cong., 2d sess., (Washington: Government Printing Office, 1958), pp. 16-25; 19.

⁸ *Labor's Grass Roots* (New York: Harper & Brothers, 1959), p. 235.

⁹ *Trade Unionism in the United States* (New York: D. Appleton and Company, 1921), p. 55.

erning the employment relationship are included in "union functions." When unions cannot carry on these functions, they fade away. It is sobering to realize that there is a substantial death rate among local unions as a result of unsettled internal clashes.

IJR SUPERIOR TO UF

Clyde W. Summers, prolific, thoughtful writer on internal union affairs, is the leading spokesman for "individual interest predomination."¹⁰ Evaluating a decade of Taft-Hartley, he concluded that individual rights were scarcely protected if these conflicted with the mutual interest of unions and employers.¹¹ Subsequently, Summers asserted that under a labor agreement workers have rights, "the enforcement of which are not subject to the union's exclusive control," and the union and employer cannot adjust or ignore them without workers' consent or authorization. Although he added that individual rights are limited by the agreement and the union had a right to insist upon its enforcement, it is clear that Summers accords priority, if not superiority, to individual rights.¹² Because these "will be subordinated to collective institutional interests," Summers insists that they can only be protected "by law."¹³

Implicit in this view is an existing cleavage between workers and their unions, assuming that employers and unions are waging war over, or making bargains regarding control of, the work terms of employees.¹⁴ Alfred W. Blumrosen accepts this when he segregates "critical job interests" from collective union-employer rights. The former are any actions destroying the employee's claim to employment, like discharge, major discipline, compensation for work, basic wages and seniority.

¹⁰ This is the characterization used in Professor Cyrus F. Smythe's report to the American Bar Association's Section of Labor Relations Law, Washington, August 9-10, 1965, *Labor Relations Reporter*, Vol. 59 (August 16, 1965), pp. 281-282.

¹¹ "A Summary Evaluation of the Taft-Hartley Act," *Industrial and Labor Relations Review*, Vol. 11 (April 1958), pp. 405-412; 409. The data in my study tend to confirm his conclusion that Section 8(b)(2) has not been obeyed.

¹² "Individual Rights in Collective Agreements and Arbitration," *New York University Law Review*, Vol. 37, (May 1962), pp. 362-410.

¹³ "Freedom of Association and Compulsory Unionism in Sweden and the United States," Vol. 112. (March 1964) *University of Pennsylvania Law Review*, pp. 647-696.

¹⁴ J. B. S. Hardman, "State of the Movement," in *The House of Labor*, J. B. S. Hardman and Maurice F. Neufeld, eds., (New York: Prentice-Hall, Inc., 1951), pp. 52-84; 67.

Meritorious claims should be measured from the perspective of the individual.¹⁵

The courts and NLRB permit workers to vindicate rights arising from agreements. Although the Supreme Court is unclear in delineating circumstances when an employee may sue for "uniquely personal" benefits and when "he must step aside for the union,"¹⁶ it tends to enforce individual rights. Similarly, the NLRB, not without exceptions, accords preference to IJR. As long as workers tender fees and dues, they are immune from union-induced job sanctions. In *Miranda Fuel*,¹⁷ the Board found unlawful the union-caused employer's reduction of the employee's seniority. Even though almost all members voted to deprive the employee of his seniority because he breached a long-standing practice, the NLRB concluded that the union's conduct had exceeded its legitimate purpose.

Writers who condemn "union power" also place job rights above and (hopefully) beyond the control of unions. They hold that unions possess too much power over jobs, make "decisions as to who shall hold jobs and administer 'codes of industrial jurisprudence.'"¹⁸ Though I am not suggesting that Summers and Blumrosen necessarily share the latter view, I note merely that both approaches consider IJR inviolable.

UF SUPERIOR TO IJR

This approach derives from the historical and institutional notion that job consciousness is the central core of unions' functions. In this formulation, the union controls job rights; it must fix, alter and enforce rules governing jobs and their holders.¹⁹ All individual claims

¹⁵ "Group Interests in Labor Law," Vol. 13 (Spring 1959), *Rutgers Law Review*, pp. 432-484; same, "Legal Protection for Critical Job Interests; Union-Management Authority versus Employee Autonomy," Vol. 13, *Rutgers Law Review*, pp. 631-665, same; "Legal Protection Against Exclusion from Union Activities," Vol. 22, (Winter 1961), *Ohio State Law Journal*, pp. 21-38; same, "The Worker and Three Phases of Unionism: Administrative and Judicial Control of the Worker-Union Relationship," Vol. 61 (June 1963), *Michigan Law Review*, pp. 1435-1526.

¹⁶ *Smith v. Evening News Association*, 371 U. S. 195 (1962), Mr. Justice Black's dissenting opinion at 204.

¹⁷ 140 NLRB 181 (1962), set aside, 326 F. 2d 172 (CA-2, 1963).

¹⁸ Lillian W. Kay, *Economic Implications of Union Power*, (New York National Association of Manufacturers, 1962), p. 31.

¹⁹ Selig Perlman, "The Basic Philosophy of the American Labor Movement," *The Annals*, Vol. 274 (March 1951), pp. 57-63; Philip Taft, "Internal Characteristics of American Unionism," *ibid.*, pp. 94-100.

are encompassed within, settled by, and subordinate to, unions' collective representational responsibilities.

It adopts certain notions regarding the nature and task of unions, the role of intraunion processes and group protection of members' job rights. Before unionization and before a worker is hired, there are no IJR. Just as workers obtain job protection through unions, so also they must share with members control over all jobs, including theirs. Both job benefits and workers' competing job claims must be resolved within unions. Since there is no three-way relationship—individual, union and employer—but a two-way one between the union (embracing all jobholders) and employer, this view rejects legal principles separating and enforcing IJR.

Various writers emphasize the importance of intraunion processes. John T. Dunlop noted differing employee preferences;²⁰ John D. Pomfret observed that unions must “mediate between its members” so that employers “may deal with one set of consistent demands rather than a cacophony of different ones”;²¹ Neil W. Chamberlain saw “informal, shifting, and frequently underground combinations of employees within unions”;²² James W. Kuhn reported “fractional bargaining” at the plant level;²³ Melville Dalton evolved the concepts of “working illegalities” and “cooperative evasions” to characterize intraunion and union-employer transactions;²⁴ and Robert Dubin noted both a power struggle between the employer and union and one “within each of these groups.”²⁵ George W. Taylor placed UF in a central position when he stressed “intra-union procedures” for insuring “full and adequate consideration of . . . diverse and conflicting aims . . .

²⁰ “The Public Interest in Internal Affairs,” in *Selected Readings, op. cit.*, pp. 18-16.

²¹ *New York Times*, (October 22, 1964).

²² “Determinants of Collective Bargaining Structures,” in *The Structure of Collective Bargaining*, Arnold R. Weber, ed., (New York: The Free Press of Glencoe, Inc., 1961), pp. 3-19; 9.

²³ *Bargaining in Grievance Settlements: The Power of Industrial Work Groups*, (New York: Columbia University Press, 1961).

²⁴ “Cooperative Evasions to Support Labor-Management Contracts,” *Institute of Industrial Relations*, University of California, Reprint No. 107 (1962); Dalton, *Men Who Manage* (New York: John Wiley & Sons, Inc., 1961), Chapter 5, pp. 110-147.

²⁵ “Behavioral Science Analysis and Collective Bargaining Research,” *Labor Law Journal*, Vol. 16 (August 1965), pp. 500-508; 504.

and an accommodation."²⁶ Like Taylor, Arthur J. Goldberg and David L. Cole emphasized the centrality of UF.²⁷

Unlike those who raise IJR above the group, Taylor and the others conceive IJR and unions as a single entity. UF involve a continuous political process. When workers have access to their unions they have a forum for resolving individual claims and aspirations. Responsibility and authority for handling IJR rest firmly and unequivocally within local unions where union leaders share in the process with members and the former are empowered to implement agreed-upon policies.

IJR AND UF ACCOMMODATED

This approach accepts the internal needs of unions to settle differences among members. But those holding this view are uneasy regarding the "growing power of unions . . . over lives of individual workers,"²⁸ and ask "whether organized labor is actually becoming a menace to freedom."²⁹ Their distress characterizes several Fund for the Republic pamphlets and was capsuled by Clark Kerr: "The great current issue is the impact of the union on the freedom of the worker."³⁰

The striking-a-balance view treats IJR as unalienable rights and relies on these assumptions: (1) workers have job interests which must be protected; and (2) unions cannot and will not always protect these interests. Since unions are partly political, have no separate judicial process, engage in both conflict and negotiations, and must survive, IJR cannot be entrusted to their leaders, internal processes or majorities.

This approach first draws boundaries around IJR and second finds a working harmony with UF. Asserting that unions engage in a

²⁶ "Public Responsibility of Unions in Collective Bargaining," in *Labor's Public Responsibility*, (Madison: National Institute of Labor Education, 1960), pp. 16-27, 9; and "Collective Bargaining," in *Automation and Technological Change*, John T. Dunlop, ed., (Englewood Cliffs: Prentice-Hall, Inc., 1962), pp. 84-102, 99.

²⁷ "A Trade-Union Point of View," pp. 102-118, and "Union Self-Discipline and the Freedom of Individual Workers," pp. 88-101, in *Labor in a Free Society*, *op. cit.*

²⁸ Benjamin Aaron, "Changing Legal Concepts and Industrial Conflict," in *Industrial Conflict*, Arthur Kornhauser, Robert Dubin and Arthur M. Ross, eds., (New York: McGraw Hill Book Co., 1954), pp. 418-427, 425; Aaron, "Some Aspects of the Union's Duty of Fair Representation," *Ohio State Law Journal*, Vol. 22 (Winter 1961), pp. 39-63.

²⁹ William M. Leiserson, *American Trade Union Democracy*, (New York: Columbia University Press, 1959), p. 81.

³⁰ *Unions and Union Leaders of their Own Choosing* (New York: Fund for the Republic, 1957), p. 6.

“political process” when they serve as brokers among workers with conflicting interests and defining the process as involving a “melange of power, numerical strength, mutual aid, reason, prejudice, and emotion,” Cox concludes that “limits must be placed on the authority of the group, but within the zone of fairness and rationality . . .”³¹ Hanslowe would permit union control over IJR provided unions met the “strictest requirements of honesty and performance” and insured a “high degree of democratic self-government.” Conceding that standards have been “less than perfectly formulated,” he noted, “the union’s conduct must not be willful, arbitrary, capricious or discriminatory.”³² Aaron finds conflicts between IJR and UF as “unavoidable concomitants of our collective bargaining system,” and concludes that we must find the “way to resolve them without destroying the rights of either the minority or the majority.”³³

Earlier I noted that the NLRB and courts tended to insulate IJR from UF. However, their decisions do not always endorse IJR. Thus, in *Ford Motor Co. v. Huffman*, 345 U. S. 330 (1953), the Supreme Court said that unions must be granted a “wide range of reasonableness in serving” units they represent, “subject always to complete good faith and honesty of purpose.” In *Humphrey v. Moore*, *supra*, “Conflict between employees represented by the same union is a recurring fact. To remove or gag the union in these cases would surely weaken the collective bargaining and grievance processes.” Similarly, in some cases the NLRB found no violation where it found that the unions’ true motive, legitimate purpose or good faith was the basis for causing job discrimination. Like the Court, the NLRB occasionally strives to accommodate UF and IJR.³⁴ Neither NLRB nor court decisions “fit easily into the framework of generalization,” and “are more likely to turn upon the facts of a given case than upon the application of an established rule of law.”³⁵

³¹ *Law and the National Labor Policy*, (Los Angeles: Institute of Industrial Relations, University of California, 1960), p. 84.

³² “Individual Rights in Collective Labor Relations,” *Cornell Law Quarterly*, Vol. 45 (1959), pp. 25-55; 46, 52, and Hanslowe, “The Collective Agreement and the Duty of Fair Representation,” *Labor Law Journal*, Vol. 14, pp. 1052-1072.

³³ “The Individual’s Legal Rights as an Employee,” *Monthly Labor Review*, Vol. 86 (June 1963), pp. 666-673; 673.

³⁴ Trial Examiner Harold X. Summers provides an excellent comprehensive summary of this point in, *Shield Radio & Chicago Federation of Musicians, Local 10, AFM*, 153 NLRB No. 11 (1965), pp. 19-23 mimeo.; *Wanzer Dairy Co.*, 154 NLRB No. 66 (1965).

³⁵ “Some Aspects of the Union’s Duty of Fair Representation, *op. cit.*,” p. 63.

IJR AND UF SEGREGATED IN UTILITY-TYPE UNIONS

Recharacterizing unions as "public utility or service" agencies "rather than . . . voluntary membership" groups, Arthur M. Ross relies on these propositions:³⁶

1. Collective bargaining is the principal business of unions;
2. Most employees are non-participating, uninterested and involuntary members who are unequipped for major decision making and behave as "clients or customers" asking their unions only for efficient service as "electricity users";
3. Collective bargaining is essentially a leadership function which requires not representative but fiduciary-type union leaders;
4. Unions as organizations lead a life separate and distinct from members, with "organizational survival" the "central aim of leadership;"
5. Members react to, or acquiesce in, collective bargaining policies because they "do not emerge from the membership but are developed in the upper reaches of company and union officialdom";
6. Neither union activity "at lower organizational levels close to the rank and file" nor "temporary opportunistic factions" seriously challenge the concept of the union as a "service agency for clients";
7. Union dues are defined not as "membership obligations but as service charges or taxes"; and
8. Unions also share with management "important governmental functions in the regulation of their constituents."

The Ross thesis compels us to view IJR and UF from entirely different perspectives. No longer are the former governed by the unions' political process. In his earlier piece Ross noted that rank and file pressures had to be reconciled, but in his recent one he observes that fiduciaries are responsible for compromising the "interests of different constituents against each other." He concludes that these pressures are akin to those displayed by stockholders or utilities' customers, rather than the volatile and exaggerated demands of union members. If there is no worker's community and if the union meeting is a plebiscitary body, there is no place for or means of reflecting, reconciling or representing members' interests.

This implies that each employee acquires independent and distinct job rights requiring protection "so long as union leaders exercise

³⁶ "Labor Organizations and the Labor Movement in Advanced Industrial Society," *Institute of Industrial Relations*, Reprint No. 252, (Berkeley: University of California, 1965), pp. 1359-1385; all quotes from this article. Ross, *Trade Union Wage Policy*, (Berkeley and Los Angeles: University of California Press, 1950).

important control over job opportunity.” But these are not IJR within membership organizations which govern the collectivity of jobs, since they are like the shares of stock or use guarantees customers receive from corporations or utilities. Giving limited participation rights to investors or satisfying utility customers is far different from meeting workers’ needs and hopes. Jobs are far more an intimate element of workers’ lives than investments or services. What unions are and what they do determine in a decisive way much of workers’ lives. Unions are more comparable to political than to business or utility organizations.³⁷

Ross seemingly denigrates the debates, conflicts and compromises within local unions, since UF, if carried out, are rarely meaningful when “collective bargaining has become a business function devoid of preternatural significance.” His formulation suggests that unions without members remain unions, that unions are mere labor-selling and delivery agencies for fixed prices, and that collective bargaining is a one-shot not continuous process. Having submerged UF, Ross turns over to the fiduciaries’ responsibilities for fair representation, equal treatment in the administration of job opportunities and good faith prudent handling of IJR. If Ross’s concepts accurately reflect the major elements of our industrial relations system, then solving the IJR-UF conflict will be comparatively easy.

OBSERVATIONS AND THEMES

This brief inventory of approaches for handling IJR and UF skims the voluminous literature and decisions. These questions are relevant: Do workers have rights as employees, unrelated to union membership? When must individual rights yield to the majority? Are job rights a legal fiction? Can we segregate job rights—those governed by unions and those immune from their control? Do unions via collective bargaining create, represent and enforce job rights? Under what conditions may unions and employers override IJR? As we search for ways to eliminate racial discrimination, do rights to work and jobs require protection from unions?³⁸ Can we strike a balance between immunities for IJR and unions’ power over jobs? Is the conflict more reconcilable if we adopt Ross’ concepts?

³⁷ Otto Kahn-Freund, “Trade Union Democracy and the Law,” *Ohio State Law Journal*, *op. cit.*, pp. 4–20.

³⁸ Michael I. Sovern, “The National Labor Relations Act and Racial Discrimination,” *Columbia Law Review*, Vol. 62 (April 1962), pp. 563–632.

Are IJR and UF compatible or conflicting? Some contend that they can exist harmoniously. Assuming that job rights are collective and unions must reflect, reconcile and represent the claims of all jobholders, it follows that UF are compatible with IJR. Others contend that IJR and UF are always clashing because the interest of individual workers cannot be encompassed within the collective job territory. The literature and decisions leave the impression that IJR-UF conflicts are widespread and unresolved. This does not correspond with reality because most disputes over job rights are settled within unions to the satisfaction of both individual claims and unions' aims. And it could not be otherwise because unions are organized to satisfy members' needs and goals. If these were unsatisfied, members would desert or change unions, foment wildcat strikes, reject unions' grievance and contractual settlements or create instabilities.

However risky, a look into the future is useful. Will the conflict be harmonized? Probably not, but we shall, paraphrasing Reinhold Niebuhr, find proximate solutions for insoluble problems. If the number of 8(b)(2) charges is a criterion, there is a substantial diminution between fiscal years 1958 and 1964. In the former, these constituted 61.2% of all charges filed against unions, whereas by 1964 they were 36.4%, even though there was an increase of 1664 charges during this period. Unions are rationalizing their records to avoid indiscriminate discharges for failure to tender dues and fees. Better educated and alert membership, more sensitive leadership and greater awareness of members' civil liberties are likely to diminish cavalier job discrimination. Both the courts and NLRB seem somewhat more responsive to UF and members' obligations. And Section 8(f), added to LMRA in 1959, recognized the peculiar nature of particular problems in the building trades.

But the picture may not be as rosy as the above suggests. Technological changes producing job contraction, rising expectations among workers for income security, struggle for job equality and expending job benefits could intensify the IJR-UF conflict. If unions cannot fulfill their three R's role to the satisfaction of workers and community and if Ross' recharacterization accurately mirrors existing union conduct, the conflict will likely intensify. Balancing all factors, including workers' access to the NLRB, courts and arbitration for protecting IJR, I conclude with some reservations that we shall evolve an accommodation between IJR and UF within our industrial relations system.

LEADERSHIP STRATEGIES FOR ACHIEVING MEMBERSHIP CONSENSUS DURING NEGOTIATIONS

RICHARD E. WALTON
Purdue University

I—DEFINITION OF THE PROBLEM SITUATION

This paper deals with leadership attempts to control their own constituents. Assume two parties are engaged in "social negotiations," which has been defined in terms of the following four conditions and their associated behavioral processes:¹ (1) Leaders of two groups are negotiating important issues involving conflict of interest, and therefore require *bargaining*. (2) The agenda includes potential for common gain, and provides an incentive for joint *problem-solving*. (3) The level of trust between the two groups and between their respective negotiators is important because it affects the implementation of substantive agreements. Intergroup relations are maintained or changed through *attitudinal structuring* activities. (4) The leader has limited formal power to determine either bargaining strategy or what constitutes an acceptable agreement. Ultimately he is accountable to his group. To achieve internal consensus, he engages in *intragroup bargaining*. Many social settings meet these four conditions and therefore involve social negotiations: e.g., collective bargaining, international relations, civil rights groups bargaining with authorities.

Analysis of negotiations in these terms identifies tactics unique to each subprocess. The tactical requirements of the four subprocesses are often more than different, they happen to be mutually contradictory. Thus, synthesis of the four subprocesses reveals action dilemmas for the group leader who pursues two or more subprocesses simultaneously or in close sequence.

Two recent papers further treat the nature of the tactical dilemmas created by pairs of subprocesses, focusing on power bargaining versus attitude change² and bargaining versus problem-solving.³ The papers

¹ A general theory of social negotiations is proposed in Richard Walton and Robert McKersie, *A Behavioral Theory of Labor Negotiations: An Analysis of a Social Interaction System*. (New York: McGraw-Hill, 1965).

² Richard Walton, "Two Strategies of Social Change and Their Dilemmas." *Journal of Applied Behavioral Sciences*, Vol. 1 (April, 1965), pp. 167-179.

³ Richard Walton and Robert McKersie, "Behavioral Dilemmas in Mixed Motive Decision Making." Institute Paper No. 108 Institute for Research in the Behavioral Sciences, Purdue University, 1965.

draw conclusions about ways a negotiator copes with these dilemmas.

This paper focuses upon condition four, the problem of gaining intragroup consensus, considering that the leader simultaneously must deal effectively with the first three conditions of intergroup negotiations.

A leader may wish to exercise influence over the aspirations of constituents in terms of the objectives of negotiations. Also, he may want to modify the level of hostile intergroup feelings manifested by his constituents. These attempts to revise objectives and to arouse or allay antagonistic feelings often are related.

Raising constituents' aspirations makes possible greater demands on the opponent. Increasing constituents' hostility creates a climate in which ambitious demands and coercive threats are both more appropriate in the eyes of the constituents and more credible to the opponent. For example, the Johnson Administration increased U. S. commitment in Viet Nam when there was doubt among constituents about his relatively ambitious objectives and strategies. Thus, the Administration simultaneously tried to increase constituents' suspicion and hostility toward the adversaries. Similarly, in labor-management the newly elected president of the International Electrical Workers Union (IUE) may make a concerted attempt to increase the union's bargaining effectiveness with General Electric. If so, he will need to raise the aspirations of local union officials and other members.

Lowering the aspirations and antagonistic feelings of constituents permits the negotiator to make the concessions he deems necessary. For example, provocative acts by adversaries relative to Berlin and Cuba generated outcries from segments of the U. S. public calling for more aggressive action in these areas; whereas the Administration preferred to make measured and often symbolic responses and attempted to influence the public accordingly. At one point during the racial crisis in Selma, Alabama, Martin Luther King became persuaded by the Justice Department that he should not attempt the march to Montgomery that day in violation of a court order. The sentiments of his constituents and other civil rights leaders strongly favored continuing the march. His leadership task was to reduce their aspirations temporarily. Labor negotiations between International Harvester and the United Automobile Workers (UAW) have frequently involved top union officials performing a moderating role, often dissuading the local

officials from adhering to unreasonable demands and from advocating unnecessarily militant strategies.⁴

II—INTERGROUP INFLUENCE

It is commonplace to note that many tactics by chief negotiators are "window dressing" for the committee or membership. They may be termed "rituals," suggesting that the behaviors perform routine and ceremonial functions. Actually these and other tactics often involve great subtlety and perform essential and difficult functions of intra-organizational influence.

Why the need to influence? Because the leader and member occupy different structural positions, they have different evaluations of proposals and estimates of the feasibility of achieving or resisting demands: (1) Leaders more than members are sensitive to issues of an institutional character, including, considerations of precedent, policy, public image, membership size, comparisons with other groups, etc. (2) Also leaders can better judge the full range of implications of some issues e.g. a complex benefit plan or an arms control agreement. (3) Leaders are often more calculating and better appreciate the full range of sanctions that both sides can invoke if there is failure to agree. (4) Often these sanctions have differential adverse effects on the lives of leaders and members. (5) Finally, leaders have more information about the opponent's preferences and power, more skill in interpreting clues, and more opportunity to test out their hunches through tentative probing.

Thus, typically a leader has a more realistic view of the situation considerably in advance of his membership. How does he achieve consensus around his own views? "Consensus" here refers to the requisite level of support to make a binding decision which commits the total organization.

Assume that the leader of the group advancing the demands must reduce an unfavorable discrepancy between the members' expectations and his own. He may adopt an active influence strategy, attempting to avoid ambitious expectations at the outset or reducing them during negotiations by:

- (a) structuring the planning committee to exclude persons who

⁴ Robert McKersie, Charles Perry and Richard Walton, "Intraorganizational Bargaining During Labor Negotiations." *Journal of Conflict Resolution*, Vol. IX (December 1965).

- are likely to urge greater demands and more militant strategies;
- (b) bringing into more direct contact with the opponent those who underestimate the opponent's strength or determination and who may revise this estimate on the basis of such an experience;
 - (c) presenting information, developing arguments and employing emotional appeals in order to revise the constituents' evaluations and perceptions;
 - (d) invoking personal prestige or political power to encourage dissenting subgroups to bring their views into alignment with his view.

Alternatively, the leader may reduce the discrepancy through a more passive strategy, rationalizing disappointing outcomes after the fact and/or obscuring the actual results which fall below members' expectations. This approach is implemented by:

- (a) "going-through-the-motions" during bargaining, i.e., appearing to conform completely to the members' strategy expectations and to their preferred objectives;
- (b) shifting the blame to other groups or to circumstances beyond the leader's control;
- (c) limiting the opportunity for surveillance, e.g. by excluding those members who would object to or reveal the extent of the concessions made in the interest of reaching agreement;
- (d) setting bargaining ground rules against publicizing the progress of negotiations;
- (e) utilizing unwritten agreements or secret understandings to cover those concessions which are not compatible with the expectations of the membership;
- (f) directly misrepresenting the level of achievement, e.g., by exaggerating the value of a minor item conceded by the other or dismissing as unimportant some concession gained by the other.

The above list of intragroup influence tactics is not exhaustive. It represents the more important maneuvers employed in several dozen labor-management negotiations studied by McKersie and the present author.

III—DILEMMAS BETWEEN INTERGROUP NEGOTIATING TASK AND ACHIEVING INTRAGROUP CONSENSUS

The influence techniques for obtaining the requisite membership support often interfere with interparty negotiations, creating the

dilemmas described below. For ease of exposition, unless otherwise stated the dilemmas are presented with the constant assumption that the leader's task is to take a less militant bargaining stance than members expect or to reduce members' expectations about substantive results.

Power Bargaining vs. Achieving Intragroup Consensus

Power in interparty negotiations is built by displaying membership militancy and commitment and occasionally fulfilling an explicit or implicit threat. However, considering the problem of building intragroup consensus, the leader prefers flexibility rather than commitment. The discussion turns to several specific tactical dilemmas.

Membership Power vs. Leadership Control. A leader can often gain a power advantage in intergroup bargaining by indicating that not only are his constituents more ambitious and less reasonable than he is, but also he cannot greatly influence them unless their present minimum demands are met.

Although made for the benefit of the opponent, messages along these lines encourage members to assert their influence, and hence in fact decrease the leader's intragroup control. Conversely, if a leader demonstrates effectiveness in reducing the level of aspiration of his constituents when that becomes desirable during negotiations, he often loses some leverage in intergroup bargaining.

For example this dilemma is confronted in its sharpest form by a union official when he is faced with a recalcitrant subgroup threatening an unauthorized strike unless there is more progress—even before negotiations are concluded. Sometimes if the official brings the dissenting subgroup into line, he loses intergroup power; whereas if he does not, it gains the ascendancy.

Crystallized vs. General Objectives. Should a leader create ambitious and crystallized expectations on the part of the constituents? Or, should he keep expectations conservative and vague? In order to maximize one's bargaining power in intergroup bargaining it is often tactical to develop strong membership commitment to fairly specific objectives.

In contrast, achieving intragroup consensus may require that members' expectations be kept both vague and conservative. Thus, the more a leader employs specificity and firmness in intergroup commitment strategy, the more difficult it is to achieve internal consensus.

Broad vs. Narrow Participation. How much should members participate in developing negotiating proposals? A group's bargaining position is strengthened by the implied or actual membership commitment to the group's proposals which results from participation.

Broad participation has potential disadvantages for the leader who must eventually achieve consensus around a feasible set of demands. Members may become *too* committed to a set of proposals which are *too ambitious*. Also members may become so interested in the progress of negotiations that the leader may find it difficult to employ several influence tactics discussed earlier, such as limiting member surveillance and misrepresenting the level of achievement.

Ignoring Threats vs. Confronting Harsh Realities. In intergroup bargaining it is often effective for the leader to ignore, deny, or discredit the opponent's tactical threats. The effectiveness of an opponent's threat depends upon whether it is perceived as credible. If the opponent's threats are not heard or are not believed, he will not expect to derive any gains from them, and will not feel an obligation to follow through with fulfillment.

However, if the constituents advocate unrealistic actions, the leader may be able to divest them of these views by confronting them with the strength and determination of the opponent. Thus, he may want to recognize and identify commitment statements by the opponent.

Indirect vs. Direct Contact. Should the influential doubters among the group's membership be brought face-to-face with the opponent? This direct contact often has the advantage of helping the leader build a consensus around his own more realistic assessment of the opponent's strength and determination.

But in terms of intergroup bargaining the leader risks losing some control over information reaching the opponent. The more people involved the more likely it is that one of them will emit clues helpful to the opponent. Another risk is that the opponent may be too successful in making believers out of doubters.

Overstatement vs. Understatement of Concessions. In intergroup bargaining it is often tactical to overstate the value of a proposal, so that when it is dropped, one can ask for something in return. Exaggerating the value of a false issue creates intragroup difficulties if the membership is also misled. Leaders can't count on the membership to know the real (small) value of a particular concession which the opponent believes it is a major one, especially when issues are so

complex that the membership must rely upon the leaders to interpret and evaluate them.

Understatement vs. Overstatement of Achievement. How should the leader characterize his group's bargaining success? With reference to the members, the leader prefers to claim a victory, overstating the value of the final agreement in order to gain support for the settlement and the leadership.

With reference to the opponent, the leader is inclined to understate the opponent's concessions in order to gain his agreement and avoid having him feel defeated. Feelings of defeat can affect the post-negotiation relationship; and it can create a psychology of "wait until next year," including a determination to do better next time.

Problem-Solving vs. Intragroup Consensus

Opportunities may arise for reaching a solution which is mutually satisfactory in terms of the original objectives of the two parties. However, the leaders may not be able to engage in the necessary problem-solving interaction because of internal pressures, which they themselves helped generate.

Integrative Solutions vs. Win-Lose Orientation. The leader, more than his constituents, is aware of integrative possibilities, in which neither side loses. For example, there are an increasing number of areas in the international situation where there is collaborative as well as conflict potential in United States relations with the Soviet Union. The continued orientation of the U. S. public is to count wins and losses in diplomatic encounters with Russia, thereby creating a domestic bind for any President who would vigorously search for integrative solutions, rather than pursue "winning" ones.

Genuine Exploration vs. "Touching All Bases." How many proposals should be taken to the negotiating table and how should time be allocated to them? The requirements of problem-solving and building intragroup consensus usually create a tactical dilemma. Discussing the pet proposals of every organizational faction often helps gain consensus around the eventual results, but prevents more serious exploration of the integrative potential of fewer items.

Attitudinal Structuring vs. Intragroup Consensus

The intergroup negotiations frequently require the leader to present himself as moderate, even sympathetic to his counterpart from the

opposing group. Especially if the parties are entering into problem-solving rather than pure competition bargaining, the leader will prefer to communicate trust, rather than suspicion.

However, the leader may be advised to display suspicion and militancy toward the other leader in order to retain confidence of the membership and avoid being charged with "going soft" or "selling out." Actually the more the leader believes he will fall short in achieving the original substantive objectives, the more he will display personal militancy. This display makes it easier for constituents to accept less than they had earlier expected; and it vicariously dissipates some of the hostility bolstering the ambitious demands.

Initiatives in Developing Trust vs. Meeting Member Expectations.

Certain behaviors are instrumental in achieving more positive attitudes between the representatives of the two groups, but also tend to complicate the problem of achieving intragroup consensus:

- (a) The identification of personal characteristics which are common to the two leaders and the use of similar language are tactics which tend to create trust between them; but also risk alienating them from their respective groups.
- (b) An emphasis on the fact that leaders may have a mutual interest in stability and avoiding conflict increases mutual understanding between them; but it may also lead to concerns on the part of members that leaders are placing their own personal political interests ahead of group interests.
- (c) Assisting the opponent leader in strengthening his position within his own organization and treating him with respect can build good will between leaders; but violate members' expectations.

Not only do member expectations preclude the positive overtures above, but also specifically include provocative behaviors by the leader, requiring that he publicly invoke favorite intergroup stereotypes, indulge in emotional displays and saber rattling, angrily reject the opponent's inadequate proposal, refer to the group's objectives in win-lose terms, etc. If the leader manifests these normative behaviors today, he is in a better position to influence the members tomorrow.

IV—COPING WITH THE DILEMMAS: SECRET DIPLOMACY,
TACIT COMMUNICATION AND NEWS MANAGEMENT

Generally, the dilemmas described above require that leaders conform to the dictates of either the intergroup processes or the intragroup process. However the leader often can take supplementary steps

to minimize these dilemmas. The general problem is to try first to communicate different messages to one's own members and to the opponent; and then in other ways to control the extent to which those two audiences learn each other's views, levels of expectation, feelings, etc. The coping mechanisms can be viewed under three headings: secret diplomacy, tacit communication, and news management.

Secret Diplomacy

Secret negotiations maximizes separation of the intergroup bargaining and intragroup consensus building. Separation may be both physical and temporal: the leaders can enter into secret negotiations, reach a mutual understanding, and then announce publicly that they are "entering into talks." During secret negotiations the leader can attend to the requirements of intergroup bargaining power in the following ways: he can cite the membership initiative which *would* develop if the talks were to become public before agreement had been reached; he can indicate that the membership aspirations *would* be more ambitious and crystallized than his own; he can note that members *would* demand broader participation, thereby making agreement more difficult; etc. By not actually invoking them, the leader can use these intergroup bargaining tactics without simultaneously creating difficulties in eventually bringing the members into line. Thus, when the two leaders have reached a private understanding, each can then go to work and structure realistic expectations on the part of their respective memberships.

Secret intergroup negotiations followed by a period of staged public negotiations and consensus building also ease the dilemmas between intergroup problem-solving and intragroup processes. Secret negotiations permit freer and fuller exploration of a problem; subsequently, if their members expect it, the negotiators may "touch-all bases," saying the necessary things about all issues advanced by important membership factions.

Tacit Communications

This coping mechanism involves tacit communication by the leader of one group and relies upon tacit cooperation of the opponent in return.

One leadership tactic discussed earlier involves complying with the members' expectations about bargaining behavior e.g., using intergroup stereotypes, militant talk, etc. Often this has the advantage of gaining

the confidence and support of members, but runs the risk that the opponent will read it as either the leader's own feelings or a bonifide threat or a deliberate attempt to whip up these feelings rather than simply to comply with them. If the leader can communicate tacitly to his counterpart that in fact he is only going-through-the-motions, he reduces or eliminates these risks.

Recall the potential dilemma created when a leader wants to involve in negotiations the doubters among his membership so that they would experience the opponent's adamancy; but is afraid that the members might actually overreact or furnish the opponent with other bargaining clues. If leaders of the two groups can reach private agreement on the outcome, they tacitly cooperate, each playing their respective roles in helping the other build internal consensus.

Tacit communication and cooperation between the leader and his opponent is necessary for minimizing the intergroup risks involved in another intragroup influence maneuver, namely overstating the value of the concessions his group obtained from the opponent. A negotiator who anticipates that he will fall short of reaching his original negotiating objectives needs the tacit cooperation of his opponent in letting him claim trumped up gains to save face.

News Management

With or without the aid of either tacit communications or secret diplomacy, the leader will manage the news in the interest of minimizing his own dilemmas. He manages a news item relevant to intergroup negotiations by transmitting or not transmitting, by giving emphasis or deemphasis, by providing context, by giving fleeting or sustained attention to the same news item, etc. The leader manages the news in order to achieve specific distortions in the perceptions of his constituents, such as the following:

If the membership persists in overvaluing an item, the negotiator will tend to overstate the difficulty in achieving it.

If there are several subtle and complex implications of an issue which account for the leader's opposition to a given outcome of negotiations preferred by the members, the leader will tend to exaggerate the importance of any arguments against the proposal which are simple and readily understood.

Assume that two groups which have achieved a desirable level of good will experience great difficulty in reaching agreement on a matter of deep importance. Objectively the situation

may reach crisis proportions as negotiations appear to the leaders to be on the verge of a breakdown, but the leaders will usually choose not to fully communicate the gravity of the situation. They are afraid that polarization of attitudes of their respective populations will hinder their conduct of intergroup relations.

News Management and Exaggeration of Perceived Crisis. There is one self-justifying aspect of news management, especially when the distortion is in the direction of *over-stating* the degree of crisis. A leader's biased information transmitted to the constituents can arouse suspicion and hostility toward the adversary. Raising the level of intergroup antagonism itself tends to occasion further management of the news. Why?

First, the leader now faced with an aroused constituency must be more concerned that this group arousal does not develop its own dynamics and directions independent of his influence. He must therefore guard more against the possibility that news events not under his control will precipitate public reactions which interfere with intergroup negotiations. He responds by monitoring more news items and by developing grosser compensating distortions where "inappropriate" news is reaching the constituency through independent sources of news. Also, there is the more common problem related to the old adage that lies become necessary to cover up or explain away old lies.

Second, if the original distortions aroused feelings of suspicion and hostility toward the opponent, the leaders can better justify any other news management. Controlling the news becomes legitimate, even to constituents. The more severe the perceived crisis, the less the constituency withdraws confidence and support from the leader if and when it is later discovered that he had distorted information about the adversary.

Counterpressures to News Management. Under what conditions will members place counterpressures on the leader to share more information with the membership and to accept more influence from the membership?

1. The more membership confidence that the leader adheres to membership goals, the more latitude a leader has in choosing the target level of achievement and negotiation strategies.

2. The more membership confidence that a leader has high expertise in bargaining, the more latitude the leader has in choosing targets and strategies.

3. The loss of confidence which the leader suffers whenever the constituents later learn that during a crisis he deliberately distorted information depends upon which of the following factors were misrepresented: tactics; strategies; the relative strength of the two sides; the real precipitating events (versus pretexts which were planned or opportunistically seized upon); other group's motives and goals; own group's motives and goals. The factors are listed in the order of the membership's tolerance for news distortions. The hypothesis is that distortion of information about tactics, strategies and the power of the two groups involve fewer leadership risks than distortions about own group's or other group's motives and the true nature of the events which precipitated the crisis.

V—CONCLUDING STATEMENT

Achieving intragroup consensus during intergroup negotiations is not merely another instance of the general problem of group leadership. The subtlety and complexity of this particular leadership process illustrated by the action dilemmas described above create temptations to engage in private understanding with the other leader and the tendency to manage news disseminated to one's membership. Deception may be used to mislead the adversary; however, often it is intended to influence one's own constituents. In fact, there may be more outright news management for internal purpose than for intergroup purposes. As one beneficial by-product, the need to manage their respective constituent groups may provide the leaders with an important emotional basis for identifying with each other and a key practical reason for cooperating with each other at the tactical level of bargaining.

DISCUSSION

WILLIAM A. FAUNCE

Michigan State University

The purpose of this discussion is to raise some questions regarding the organizational, ideological, and broader societal context of the issues considered in these two papers. The first question I would like to pose is the following:

- (1) *What type of organizational structure is it that gives rise to conflict between individual job rights and union functions and produces the dilemmas regarding membership consensus during negotiations?*

The considerations in both papers are stated in a manner which suggests that they are generalizable to all situations. In fact, it seems clear that these issues are not universal but grow out of particular social organizational conditions that affect both their form and intensity. One set of social structural variables that seems especially important in this regard is the size of the organization and the resulting variation in complexity of organizational structure. Individual job rights versus union functions is, for example, probably less often an issue in small, undifferentiated local unions and, when it becomes an issue, is probably more often resolved through informal social processes. The fact that cases of abridgement of individual job rights of workers from small locals reach the NLRB may simply reflect the much larger number of small locals and the relative lack of formal mechanisms for conflict resolution *within* these locals when informal social processes prove inadequate.

The probability of membership dissensus, the nature of intra-party/inter-party role conflicts, and leadership strategies for resolving these conflicts are also affected by organizational size and complexity. Even in unions of the same size, however, there may be gross differences in the nature of the leader-follower relationship. Some unions are characterized by a relatively undifferentiated power structure involving little more than a charismatic leader and a mass following. Others are highly bureaucratized with a large number of authority levels separating union leaders from members. These two types of leader-follower relationships differ in their patterns of accountability and in the kinds of sanctions at the disposal of both leaders and followers. The accountability and

sanctioning processes are social structural variables that have an important bearing upon the issues presented in both the papers under discussion. Differences in the role of union and management negotiators, for example, are related to differences in the structure of the two organizations and affect the dilemmas described by Dr. Walton. While dilemmas of this sort may exist for management negotiators, they are not all of equal consequence and the patterns of resolution are probably different.

The discussion so far has been focussed upon variations in the authority structure of the organization. There are other forms of organizational differentiation that also affect the issues being considered. The differences between unions representing a single skill level or a variety of skill levels and between single plant locals and amalgamated locals have a direct bearing upon the probability of individual job rights-union function conflicts and upon the ease with which membership consensus can be achieved.

The nature of the community in which union members live and work should perhaps also be taken into consideration. The contrast between what Kerr and Siegel have termed "the isolated mass" and "the integrated group" may serve to illustrate this point.¹ Workers in isolated coal mining or textile manufacturing towns form a largely homogeneous mass and are in more or less constant communication among themselves and with their union leaders. Workers in multi-industry, urban areas, on the other hand, seldom see the people they work with except on the job and may never communicate directly with the officers in their union. Differences of this sort clearly have a bearing upon the relationship of the individual union member to the union as an organization and it is this relationship that is the underlying issue in both of these papers.

Dr. Samoff indicates that nothing would be said in his paper about "union democracy" or the internal control structure of unions. This issue has been introduced here because of the conviction that conflict between individual job rights and union functions can be best understood when seen in its organizational context. The probability that conflict of this sort will exist, the probability that it will be perceived as such where it does exist, and the probability that action will be taken when the conflict is perceived all vary depending upon social structural factors like organizational complexity, the nature of accountability and

¹ Clark Kerr and Abraham Siegel, "The Interindustry Propensity to Strike-An International Comparison," in A. Kornhauser, *et. al.*, *Industrial Conflict* (New York: McGraw-Hill, 1954), pp. 189-212.

sanctioning processes, and the amount of communication within the organization.

- (2) *What are the ideological bases for the individual job rights-union functions conflict and for the issue of leadership control of unions?*

The fact that questions regarding the abridgement of individual job rights are almost always posed in terms of the effects of unions upon these rights, suggests the ideological component of the issue. This perspective is rarely invoked, for example, in considerations of the relationship between the A.M.A. and individual doctors, between stock holders and business managers, or between Mexican migratory workers and the United States Department of Labor. Concerns with the effects of union functions were once most often expressed in terms of abridgement of ownership rights or, later, managerial prerogatives. This has become less fashionable today and an appeal to values related to the rights of individual job holders has become more common.

Saying that an issue has ideological overtones makes it no less "real." It does, however, affect the way in which the issue is framed. If there are "legally enforceable individual benefits" growing out of the "rules governing employment," then these rights surely accrue to many job holders not involved in collective bargaining relationships. Viewing individual job rights in the context of *whatever* organizational constraints there may be upon the exercise of these rights would provide a broader perspective from which to consider the issue.

There are also ideological differences among unions that would seem to have an important bearing upon "leadership strategies for achieving membership consensus." One example is the extent to which there is a tradition of and value placed upon democratic processes within the union. Among unions characterized by a democratic ideology, there may be still further variation depending upon the relative emphasis placed upon processes guaranteeing individual freedoms as opposed to processes insuring majority rule. In most unions there is a much greater emphasis upon the latter processes than upon the former since processes designed to protect individual rights are more disruptive of the centralized control necessary for efficient operation of the organization. This conflict between democratic and bureaucratic values is inevitable in contemporary industrial societies and suggests the final question I would like to pose.

- (3) *What is the broader societal context in which issues like individual job rights versus union functions and the dilemmas of leadership control emerge?*

Industrial societies and, to some extent, those in the process of industrializing are characterized by complexity, loose integration, and rapid social change. Organizations within these societies, in order to cope with complex, inter-organizational relations and a constantly changing environment, necessarily develop a more centralized control structure. The more organizational control that exists, the more limited is individual freedom since it is impossible to achieve a high level of both simultaneously. Seen in this light, any attempt to maximize either individual job rights or union organizational efficiency is apt to involve ideological conflict since maximizing one necessarily eliminates the other.

The dilemma of freedom versus control is one of the most pervasive problems in contemporary industrial nations. It is the dilemma of civil rights organizations seeking a rapid end to discrimination. It is at issue in the attempts of management to broaden the scope of jobs to permit more decision-making by workers. It can be seen in the emerging political structures in economically underdeveloped areas where there are large-scale efforts at social and economic change. And it is the dilemma of the union leader to the extent that he is concerned with protecting individual rights and achieving membership consensus while at the same time maintaining an efficient and effective organization.

Taking account of the social structural, ideological and broader social context of the issues posed in these papers does not eliminate the conflict between individual job rights and union functions nor does it resolve the dilemmas confronting negotiators in collective bargaining. As a broader perspective, however, it may suggest some solutions more closely approximating an optimum balance between individual freedoms and organizational control.

BERNARD P. INDIK
Rutgers—The State University

It is interesting to point out that these two papers take very different tacks in their methods of approaching their problems. Dr. Samoff's paper is taken from the point of view of the legalistic ap-

proach. In looking at the possible conflicting forces—that is an individual's individual job rights as contrasted to union functions—in analyzing this material he approaches the problem by looking at the legal literature on the question of the pros and cons of individual job rights vs. union functions and in effect, highlights this legal literature.

From a behavioral point of view, I don't think that he has been able to demonstrate that he has a representative sample of all cases of the conflict or compatibility of these two kinds of forces and, furthermore, even if they were representative of the legal cases the probability is that those problems that become legal cases are a distorted measure of the iceberg of conflicting forces that one may find beneath the surface—the surface being the cases that happen to come to light. How many more instances would likely occur and never reach the case level and, furthermore, would those cases that do not reach the legalistic level, either the NLRB or some court action, reflect a representative (in the sampling use of that term) picture of the internal conflict or compatibility of individual rights vs. union functions. There may be a much larger number of individual rights vs. union function conflicts of interest than those represented here. However, the intensity of these conflicts of interest is probably at a much lower level than the ones illustrated by the cases cited by Dr. Samoff. Certainly it is only the more intense conflicts that reach the level of adjudication. Could we for example use the grievance as an indicator of conflict situations within the union, noting the number of grievances filed that reflected individual vs. union conflict? This is certainly a possibility although much more difficult to get hold of in terms of the large numbers of pieces of information from large numbers of unions across the country. But this might be a better indicator than the one used by Dr. Samoff.

It is much more difficult I would think to collect information on the degree of accommodation between individual rights and union functions. Take for example the use of seniority vs. merit as a criterion for promotion. Depending on which side the individual falls, he may prefer seniority or merit as the basic criterion for promotion. Certainly in unions, seniority would more likely be a union function. On the other hand, there are unions where merit seems to be the important criterion so that either of these issues—seniority or merit—may be either an individual or a union function depending on the particular circumstances. Or would you take for example the number of times individuals agree with the union position on a particular issue as an

indication of an accommodation or would you more frequently or more easily accept as an indicator of this dimension the number of times that an individual disagrees initially with the union position and then comes around to agreeing with the union position. Here again, this would be a very difficult kind of measure to obtain on a practical basis. However, it is theoretically the more relevant kind of indicator whereas the case citing sort of approach is much more likely to give one a distorted picture.

Offhand, I would suggest that most initial conflicts of interest between individuals and unions are probably settled internally. The interesting thing that might be studied is what is this process like—that is this internal union settlement process. We seem to have very little knowledge in this area. Further, if we take the analysis of cases it is clear that the resolution of the cases is different in different cases and different jurisdictions, especially in the cases brought before the NLRB.

Similarly, when Professor Walton, for example, takes on the special problem of how the leadership of a union handles the achieving of membership consensus during a negotiation process, we find that there are many kinds of techniques that he has illustrated of the process of internal accommodation of differences within the union. However, in the paper presented here, there are many statements that are not backed up with the evidence as to their relative frequency or probability of occurrence or under what conditions exactly they are likely to occur. I would assume, of course, that Dr. Walton has been observing labor negotiations, but at this stage of our knowledge in the behavioral sciences, I would have expected him to present systematically collected behavioral data that support his descriptive analyses.

We have had, for more than 15 years, systematic techniques for observing verbal interaction in group situations (Bales, 1950). It is certainly extremely important in handling the intra-group problem for the leader in a negotiation situation to be cognizant of his intergroup relationships with management. I also would suspect that the economic and other conditions of the specific circumstances of the negotiation situation would make intergroup considerations much more powerful in resolving internal conflicts during a negotiation period as compared with the usual situation of resolving intra-group problems in the union with reference to the normal day-to-day kind of problem.

Further, the labor management situation differs very considerably

from either the international situation on one hand where consensus of the constituents or, more accurately, consensual agreement on the part of the constituents with the leader's position is frequently less questionable than is the case with member consensus with union leadership positions.

At the lower level of the inter-individual negotiating or conflict resolving does not require that the individual bring it back for consensual agreement among his constituents—the constituents obviously exist within himself—so that it becomes much more difficult and therefore much more crucial in terms of a negotiation process for the labor leader to be concerned with his own constituency and their basic majority agreement with his positions and at that specific time for he must get a supporting vote either for a strike or for acceptance of the contract with its specific stipulations. I should not be too harsh on Professor Walton for in his recent book with Professor McKersie he does a very interesting and thorough descriptive job of four phases of collective bargaining—distributive bargaining, integrative bargaining, attitudinal structuring and intraorganizational bargaining. (Walton and McKersie, 1965.)

In summary, then, let me say that I feel that both of these papers are insightful and good descriptive pieces of work. However, I think that we are beyond the point of merely describing what we see in nature. We also need to focus our attention on systematic behavioral observation in other than laboratory situations* so that clear understanding may be had as to the relative importance of context and behavior and so that the techniques, the specific methods that are used may be more adequately understood.

I am cognizant that more than verbal interaction is going on in a negotiation situation. Clearly complex subtleties occur but they are only a small part of the process. We need to know what is happening in a systematic fashion and not only in a descriptive fashion. Progress needs to be made in the *how* of the collective bargaining process. How does the process proceed? How can it be effectively improved? How does the collective bargaining process effectively resolve so many of the conflict situations and how and under what conditions specifically does it fail?

Let me propose that if collective bargaining as a process is to function to resolve conflict, internal to the union or externally, collec-

* See *The Journal of Conflict Resolution*.

tive bargaining must function to limit one or more of the following prerequisites to open social conflict (strikes). In order to have open social conflict there must be at least two sides, some, at least minimal, communication between the sides on issues or ideas that have been focalized. The parties must have polarized or alternative positions (seen by them as mutually exclusive). They must have the means of waging conflict (by at least one side). They must accept the use of the means of waging conflict (by at least one side). There must be some, usually explicit, threat and finally some final trigger to set off the threat to action.

We may then analyse any potential conflict situation in terms of which prerequisite is focused upon and how it limits these prerequisites. We can do this by the systematic study of the conflict resolution process. So that perhaps negotiation processes can be taught so that we may enable others as well as ourselves to handle the problems that they are intended to resolve.

REFERENCES

- Bales, Robert F., *Interaction Process Analysis: A Method for the Study of Small Groups*, Cambridge, Mass., Addison - Wesley, 1950.
Walton, Richard E. and McKersie, Robert B., *A Behavioral Theory of Labor Negotiations: An Analysis of a Social Interaction System*, New York, McGraw-Hill Book Company, 1965.

V

**JOINT MEETING WITH AMERICAN
ECONOMIC ASSOCIATION
ADJUSTMENTS TO TECHNOLOGICAL CHANGE**

Garth Mangum, Chairman

ADJUSTMENT TO TECHNOLOGICAL CHANGE

GARTH L. MANGUM

National Commission on Technology, Automation, and Economic Progress

Sessions on the employment impact of technological change have become almost a ritual in such gatherings in recent years. I attribute my ennui to a year spent as Executive Secretary of the National Commission on Technology, Automation and Economic Progress. I hope others are less surfeited with the topic.

The papers for this session involve adjustment to specific impacts of technological change in two transportation industries. Therefore, a few remarks concerning the general impact of technological change seem appropriate as background.

The impacts of technological change upon society have been and are so profound that it is difficult to overestimate them. Since transportation is the focus of this session and politics is the avocation of us all, consider only the role of the compass-directed sailing ship in the development of the nation-state system, the influence of primitive transportation and communications on American federalism, the importance of the railroad in facilitating development of a continent-wide nation and the anachronistic nature of present world political structures when confronted by the jet airplane, the man-carrying satellite and possible space travel. But these are not what the technological change furor has been all about. The interest has been primarily the impact of technological change on employment and unemployment.

The concern had its origin in the persistently high unemployment following 1957 and only now abating. The questions were essentially three in number: (1) Had the continuity of technological change been broken by something radically new called automation which had invalidated past assumptions about the long run beneficence of technology? (2) Was the economy becoming so productive that jobs could no longer be provided for all who sought them, necessitating severance of the traditional tie between employment and income. (3) Were technological developments so twisting the demand for labor that the uneducated and unskilled were being excluded from successful labor market participation?

With the reduction of unemployment following the 1964 tax cut, followed by increased military expenditures and tightening labor mar-

kets, the answer to all three questions became readily apparent. It was an unequivocal *no*.*

Automatic feedback controls and the computer are new, but so, by definition, is every technological change. Every change is also firmly rooted in the past for nature abhors a discontinuity at least as much as she does a vacuum. It has been said that the "first industrial revolution" mechanized the physical functions of man and the "second industrial revolution" is mechanizing his mental functions. But, after 200 years, men are still doing a lot of dirty, grubby physical work. I would hope, but doubt, that mental tedium will disappear much faster.

There are no good measures of the pace of technological change. There are two useful ones: (1) the rate of increase of output per manhour, and (2) the speed with which new inventions are applied and diffused through the economy. Though output per manhour is affected by many factors besides technological change, the rate of change of output per manhour is the relevant measure for employment policy. If output per manhour increases more rapidly than output, employment must obviously decline, but the fault would not necessarily be in the productivity. As almost everyone knows by now, the annual rate of increase in output per manhour in the private economy during the postwar period has been slightly above 3 percent per year. In the previous 35 years, it averaged 2 percent per year. This is a substantial change—a 50 percent increase in the rate of increase. But two facts must be kept in mind. First, the prewar-postwar dichotomy is misleading. There is no break in the productivity curve in 1947. If there is a break it is 1934. More accurately, it appears to be a long, slow upward swing. Second, though 2 percent to 3 percent is quite a jump, the 3 percent increase in output required to keep employment from falling is not much.

Of course, unemployment can rise without employment falling. And here is the root of the unemployment which led to current fears of technological change. If unemployment is to be restrained, economic growth must match labor force growth as well as productivity growth. Productivity growth exceeded output growth, and thus employment fell in only three postwar years. Economic growth failed to meet the

* For support of these propositions see *Technology and the American Economy, Report to the President and the Congress by the National Commission on Technology, Automation and Economic Progress*, Washington, Government Printing Office, February 1966.

combined challenge, and unemployment rose, in nearly half of the years since the second world war. During 1947–53, the growth rate averaged over $4\frac{1}{2}$ percent and unemployment averaged only slightly above 3 percent. The 1953–60 average growth record was 2.4 percent and the unemployment average above 5 percent. Growth during 1960–65 was $4\frac{1}{2}$ percent and unemployment fell accordingly. The tragedy is that, assuming productivity would have remained unchanged, an average growth rate only 0.4 percent higher from 1953 to 1960 would have maintained 1953's 3 percent unemployment.

The diffusion rate is useful both as an indication of acceleration of change and a test of our ability to foresee the future. Only case studies are available. But they indicate that the time between an original invention and its first commercial application has shrunk considerably, perhaps, on the average from 30 years to 15 years within the past century. The time between initial commercial application and adoption by, say, half of the firms in an industry has also shortened, but to a lesser extent. It is quite clear that any technology that will have a significant impact upon employment in any occupation or industry within the next decade must already be in some readily identifiable stage of commercial development. Consider the technological displacements of the postwar period, for example, coal, railroads and agriculture. Which did not provide at least a 10 year warning?

Finally, we turn to the labor market "twist." Concentration of unemployment among the uneducated led to the bottleneck thesis. The educated were in short supply, supposedly, and the uneducated unusable in a sophisticated economy. European experience and our own subsequent experience indicate that a sophisticated technology can be operated with almost any educational profile (given a nucleus of scientists, engineers, managers, etc.). Our experience is best explained by our abundance of educated people. Employers hired the educated because they could get them and left the uneducated behind. Education may determine who gets hired but not how many.

Those jobs generally considered to be the more skilled have tended to grow more rapidly than others. But the explanation is primarily inter-industry rather than intra-industry. Industries with higher skill profiles—education, medicine, etc., have experienced the higher growth. There is little evidence of substantial change within industries. And once again, employers, given a choice, hired the more skilled and left the unskilled. Ten year projections show a declining proportion of un-

skilled employment but no reduction in the number of unskilled jobs. Given the rapid rise in educational attainment, it is more likely that some will be working in jobs for which they are overqualified than it is that there will be a surplus of unskilled workers.

But to absolve technological change of responsibility for *high general* levels of unemployment is not to absolve it of blame for unemployment of particular persons in particular occupations, industries and locations. And this is the subject to which this session's papers are addressed.

AIRLINE FLIGHT CREWS: ADJUSTMENT TO TECHNOLOGICAL CHANGE IN A REGULATED GROWTH INDUSTRY*

MARK L. KAHN
Wayne State University

I. INTRODUCTION

* The research on which this paper is based is part of a larger study of the impact of technological change on labor problems in U.S. transportation industries. This project is sponsored by the Institute of Labor and Industrial Relations of the University of Michigan and Wayne State University, and is supported by a Ford Foundation grant.

Technological changes create both problems and opportunities, in varying proportions, for the employees who are directly affected by them. For airline pilots—a strategically situated employee group in an industry characterized by rapid growth and a hectic pace of innovation—the fruits of technological progress have been substantial. This paper will examine the central developments in the evolution of pay practices and working rules for these pilots, who have been effectively unionized ever since the formation of the Air Line Pilots Association (ALPA) in 1931. Our chronicle will identify three major phases: (a) the 1930's and 1940's, during which the pilots emphasized improvements in pay, first by way of governmental determination, later in collective bargaining; (b) the 1950's, when ALPA gave priority to improving and equalizing working conditions by way of new work and pay rules; and (c) the 1960's, which are witnessing a revealing series of developments hinging on working hours and involving the basic choice between income and non-work time. First, however, I must mention some of the salient characteristics of the industry and its industrial relations context.

Commercial air transportation in the United States has, since 1938, been subject to rigorous economic regulation by the Civil Aeronautics Board (CAB). Under the resulting industry structure, more than ninety per cent of the passenger-miles and sixty per cent of the mail and cargon ton-miles are provided by the eleven "trunk" lines plus Pan American World Airways. Even since 1950, there has been a six-fold increase in passenger and cargo traffic, and a healthy growth rate is expected to continue for many years. The CAB, for example, has

predicted that domestic revenue passenger-miles will expand from 44.7 billion in 1965 to 84.4 billion in 1975 even if air fares rise as much, in percentage terms, as consumer prices in general.¹

Each carrier tends to view its market as highly competitive. This is partly because of alternatives offered by other transportation media (including private automobiles) and by foreign-flag carriers on international routes. But the major impetus to compete derives from the CAB policy of certifying two or more carriers to serve each major route. Because the CAB also requires that fares be uniform for any given class of service, new aircraft types have provided an important means of (nonprice) competition. Consequently, new models have been purchased and activated at the earliest possible time.

New kinds of aircraft, which have supplied dramatic increases in payload capacity, have appeared in three major waves. 1936 to 1947 was the era of the DC-3, which carries 21 passengers at a cruising speed of 188 miles per hour. Its payload is about 400 ton-miles per hour. The late 1940's witnessed the adoption of much larger and faster four-engine piston aircraft. The DC-6, for example, carries 58 passengers 300 miles per hour and has a payload five times the DC-3: about 2,000 ton-miles per hour. Then, after a few years of relative stability, the first turbojets appeared in 1959. One was the DC-8, which carries 115 passengers about 550 miles per hour and has a payload five times the DC-6, twenty-five times the DC-3: about 10,000 ton-miles per hour. The transition has been rapid: by the end of 1964, 45 per cent of the industry's aircraft, about 810 planes, were turbine powered; and these jets carried 85 per cent of 1964's air traffic.

Improvements in aircraft, plus a host of complementary innovations in all phases of airline operations, have produced a rapid growth in man-hour output: about seven per cent per annum since 1950. This growth rate has been outpaced, however, by the increase in traffic, and the employment trend has therefore been upward. Thus, the airlines employed 16,000 in 1939, 81,000 in 1949, 161,000 in 1959, and 190,000 at the end of 1964. Flight crews have been about ten per cent of total employment: 15,000 pilots and 4,000 others, mostly flight engineers, at the beginning of 1965.

¹U.S. Civil Aeronautics Board, Bureau of Accounts and Statistics, Staff Research Report No. 5, "Forecasts of Passenger Traffic of the Domestic Trunk Air Carriers, Domestic Operations, Scheduled Service, 1965-1975" (September 1965).

Technological changes have modified the composition and job content of airline flight crews. Flight radio operators, once required on some overseas routes, were eliminated when improvements in voice radio permitted the transfer of this function to the pilots. Non-pilot navigators, formerly needed for celestial navigation on many international routes, are almost extinct today because of computerized Doppler-Loran equipment that pilots can operate. And non-pilot flight engineers, on three-man flight crews, are being succeeded by engineer-qualified third pilots. Today's technology has effectively established, apart from some transitional situations, an-all pilot crew: three pilots on large piston and turbine aircraft; two pilots on small piston equipment and on the recently introduced twin-engine turbojets. As for the pilots themselves: I see no indication that they can be economically replaced by equipment in the foreseeable future.

The upward trend of pilot jobs has encountered short-run interruptions. Pilot employment actually fell from 1946 to 1947, chiefly because of the new four-engine aircraft; from 1948 to 1949, primarily because of a general economic slump; from 1957 to 1958, partly because of the inauguration of non-stop transcontinental flights on DC-7's; and in 1959 and 1961-62, primarily because of the rapid transition to jet propulsion. In 1964, however, pilot concern about possible layoffs vanished as market growth again out-raced technology and all major carriers announced hiring programs.² In mid-1965, the president of the Air Transport Association predicted that the industry would hire 3,000 to 5,000 new pilots by 1970.

Under the Railway Labor Act, which has applied to airlines since 1936, employee representation is on a "craft-or-class" and single-carrier basis. The Act provides that if a labor dispute threatens "to deprive any part of the country of essential transportation service," the President may appoint an Emergency Board to investigate and make non-binding recommendations. Seven such Boards have been appointed for disputes to which ALPA was a party.

The pilots, as one might expect, have exhibited considerable bargaining power. I would suggest, as major factors in pilot bargaining strength: (a) the competitive environment, in which each carrier has been anxious to maintain public good will and to avoid loss of traffic to rivals; (b) the pilots' successful resistance to carrier efforts to

² See, for example, Federal Aviation Agency, Report of the *Aviation Human Resources Study Board* (September 1964).

develop multi-employer bargaining arrangements; (c) Federal subsidy policies which, especially during the 1940's and early 1950's, were important offsets to the costs of the pilots' economic gains; (d) bargaining by the pilots as a separate occupational group; (e) militant pilot support for ALPA (and, at American Airlines since 1963, for the independent Allied Pilots Association); (f) sympathetic intervention by Congress and the CAB on pilot matters; and (g) the pilots' remarkable success, earlier before Congress and later before Emergency Board, in enforcing certain productivity criteria as a traditional basis for minimum economic gains.³ In 1964, airline captains earned an average of \$24,000, copilots an average of \$15,000.⁴

II. THE BASIC PILOT PAY FORMULA

Airline first pilots (captains) are paid by a monthly formula that depends heavily upon factors affecting aircraft productivity. This formula consists of four elements:

- (a) *Base pay* (monthly) or *longevity pay* (per credited flight hour), increasing—up to eight, nine or ten years—with the pilots' length of service for the particular airline; *plus*
- (b) *Hourly* (flight) *pay*, varying with the speed of the aircraft and incorporating a day-night differential; *plus*
- (c) *Mileage pay*, determined (since the early 1950's) by a negotiated "pegged speed" for each aircraft type; *plus*
- (d) *Gross weight pay*, generally 2 cents per hour for each 1,000 pounds of the aircraft's maximum certificated gross weight.

Two of these four elements were the basis of pilot pay from 1918 through 1926, when scheduled air mail transportation was initiated and conducted by the U. S. Post Office Department: base and mileage pay. The Post Office also provided differentials for night flying and for routes designated as hazardous. This pattern was then retained by private air mail carriers until the 1929 depression began, after which many substituted hourly rates for mileage pay.

In September 1933, the National Labor Board (NLB) accepted jurisdiction of a pay dispute between ALPA and the carriers after the

³For some historical detail, see M. L. Kahn, "Wage Determination for Airline Pilots," *Industrial and Labor Relations Review*, Vol. 6, No. 3 (April 1953).

⁴Air Line Pilots Association, "1964 Wage Analysis" (processed).

carriers announced a new pay formula and ALPA threatened an industry-wide pilot strike. The carriers, to avoid a strike, agreed to accept the NLB's decision on a retroactive basis. It is interesting, I think, that pilot pay would have been about the same in 1933 under either the carrier or the ALPA formula. Both parties were concerned about the pay and employment effects of the larger and faster aircraft of the future. ALPA, in addition to a base plus mileage formula (with day-night and hazardous terrain differentials), asked that individual pilot flying be limited to eighty hours or 10,000 miles per month, whichever was reached first.

The NLB's Decision No. 83, issued May 10, 1934, incorporated aspects of the proposals of each party: *base pay* (increasing through the eighth year of service); plus *hourly* (flight) *pay* with a day-night differential, increasing with the speed of the aircraft up to a "200 or more" miles per hour category; plus *mileage pay* and a requirement that previous hazardous terrain differentials be retained. The NLB rejected ALPA's proposed monthly mileage limitation, but it did recommend a monthly maximum of 85 flight-hours per pilot.

Decision 83 was, by its own terms, to be effective for only one year. ALPA persuaded Congress to require, in the 1935 amendments to the Air Mail Act, that to hold an air mail contract a carrier "shall conform to decisions heretofore or hereafter made by the National Labor Board . . . notwithstanding any limitation as to the period of its effectiveness included in any decision heretofore rendered." This was the first Federal minimum wage law, and it is still in effect today (having been retained in subsequent pertinent legislation). Decision 83 provided the almost exclusive basis for pilot pay from 1934 until after World War II. Since this was mostly the DC-3 era, the effect of Decision 83 was then to establish roughly equal earning opportunities for first pilots, in the vicinity of \$700 per month, until 1947.

ALPA would not accept Decision 83 as a sufficient pay basis for the larger and faster four-engine aircraft, like the DC-6, that would be activated in and after 1946. The pilots launched a vigorous and determined effort to improve on Decision 83 as soon as World War II ended, and successfully opposed an effort by the major carriers to bargain on economic issues on an industry-wide basis. There was a Presidential Emergency Board and a 26-day strike at Trans World Airlines in 1946. An arbitration decision in January 1947 at TWA increased base pay by \$50 per month, extended the Decision 83 hourly

pay brackets up to 300 miles per hour, and raised mileage pay. Then, in April 1947, in direct negotiations with American and Eastern, ALPA obtained a "gross weight pay increment" for the first time. These gains became the pattern for the industry, and ALPA soon secured gross weight pay and the equivalent of the January 1947 TWA arbitration award from all of the other carriers.

That, in brief, was the evolution of the first pilot pay formula. ALPA has since obtained moderate increases in base pay and mileage rates, and (in the late 1950's) it persuaded the carriers to extend the hourly pay brackets to jet aircraft speeds. Consequently, the impact of jet on pilot earnings was substantial. *Table A*, for example, shows how first pilot pay is calculated at United Air Lines today for the DC-6B piston aircraft and for the large DC-8 jet. The earnings differential is about \$8,000 per year.

Copilots (first officers) and third pilots or flight engineers are generally paid a specified percentage of first pilot earnings. This per-

TABLE A

Calculation of First Pilot Monthly Pay—United Air Lines, 1965
 Assumptions: eight (or more) years of seniority; eighty flight hours, half day, half night.

Type of Pay	DC-6B		DC-8	
	Amount	Per Cent	Amount	Per Cent
Base Pay	\$ 350.00	18.6	\$ 350.00	13.7
Hourly Pay				
<i>Day:</i>				
40 × \$8.35 on DC-6B	334.00	40.8	384.00	34.0
40 × \$9.60 on DC-8				
<i>Night:</i>				
40 × \$10.85 on DC-6B	434.00			
40 × \$12.10 on DC-8			484.00	
Mileage Pay				
80 × 300 mph × \$0.025 on DC-6B	600.00	31.8	890.00	34.9
80 × 445 mph × \$0.025 on DC-8				
Gross Weight Pay				
80 × 104 (thousand lbs.) × \$0.02 for DC-6B	166.40	8.8	441.60	17.4
80 × 276 (thousand lbs.) × \$0.02 for DC-8				
TOTAL	\$1,884.40	100.0	\$2,549.60	100.0

Source: Calculated from Agreement between United Air Lines and Air Line Pilots Association dated January 18, 1965.

centage increases with length of service. At American, for example, copilots with ten or more years of service are paid 67 per cent of first pilot pay, and third pilots or flight engineers are paid 90 per cent of what a copilot with the same length of service would earn. Apart from pay levels, all pilots are subject to the same terms and conditions of employment.⁵

III. THE 1950's: A "WEB OF RULES" EMERGES

Pilot pay under the above formula, as you have undoubtedly noted, is based exclusively on flight hours. For this reason, as of 1950, carriers had little incentive to design pilot schedules on a basis that would minimize ground duty time, deadheading, and time away from home. Moreover, wide discrepancies in pay and working conditions had developed among pilots because of the traditional rule that pilots choose aircraft types, domiciles and monthly bid schedules on the basis of airline seniority. An important corollary was the principle that the carrier is obligated to provide the necessary transition training to a pilot whose seniority entitles him to move up to better-paying equipment.

Senior pilots, as you would expect, flew the largest and fastest aircraft on the longest hops and made the most money. Junior pilots were left with smaller and slower equipment, performed many more landings and takeoffs, spent much more time on the ground during intermediate stops, and were more subject to weather, traffic and mechanical delays. ALPA, responding to their complaints, wanted to add non-flight hours as a factor in pay determination without disturbing the traditional formula. And looking ahead to the arrival of jets in the late 1950's, ALPA also wanted to reduce average flight hours as a cushion against possible pilot layoffs.⁶ The sophisticated package of rules that evolved during the 1950's, at ALPA's initiative, accomplished both objectives. The major device was the obtainment of flight pay and credit, chargeable against the established 85-hour monthly

⁵ See M. L. Kahn, "Pay Practices for Flight Employees on U.S. Airlines," Chapter 1 of Appendix Volume IV of *Report of the Presidential Railroad Commission* (Washington: February 1962).

⁶ ALPA, which had unsuccessfully attempted to obtain shorter hours via explicit mileage limitations in 1933 (before the National Labor Board) and in 1946 (before a Presidential Emergency Board), also tried in 1949-51 to obtain this via collective bargaining at American Airlines and another Emergency Board (No. 94). See source named in footnote 3, pp. 330-333.

maximum, for time not actually flown in regular line service under a variety of specified conditions. These were the new rules:

- a. *Duty Ratio*. This guarantees the pilot a minimum ratio of flight pay and credit to the total (ground and flight) hours in each duty period. As of 1960, the commonest ratio in effect was 1 for 2.5 on a scheduled basis, which corresponds to maximum duty hours per month of 85×2.5 or 212.5. This was supplemented, at a number of major carriers, by a guaranteed minimum of flight pay and credit (generally four hours) in each duty period.
- b. *Trip Ratio*. This provides the pilot with a minimum ratio of flight pay and credit to each "trip," which is the total elapsed time from reporting for duty at one's domicile to the release from duty back at that domicile. As of 1960, the specific ratio widely in effect was 1 to 4, calculated on an actual time basis. This rule makes off-duty periods away from home, whether scheduled or unanticipated, into a possible pay factor.
- c. *The "Greater Time" Principle*. Pilots have been paid, since the early 1950's, for either the scheduled or actual time of each leg of a trip, *whichever is greater*. Cumulative early arrivals, or "under-flying," which are not offset by late arrivals, typically add up to one or two hours of flight pay and credit per month per pilot and reduce, to this extent, his actual available flying time.
- d. *Deadhead Credit*. A pilot "deadheads" when he travels by air as a passenger in order to meet or return home from a flight involving piloting duty. Most pilots now receive one-half flight pay and credit for deadheading, which averages about one hour per month per pilot. (Pan American gives full flight pay and credit, which is ALPA's goal at all carriers.)
- e. *Schedule Integrity*. Under this concept, a pilot with a monthly flying schedule is entitled to flight pay and credit for any part of that schedule that he does not fly, either because he is reassigned at the instance of the carrier or because he is exercising his contractual rights to vacation, sick leave and/or training. Reserve pilots, who do not have a monthly schedule, are assigned flight pay and credit at a specified daily rate (at most carriers, from 2.5 to 2.8 hours) while on vacation or sick leave or in training.

f. *Monthly Guarantees.* Under early ALPA contracts, a pilot's base pay was his only guarantee. Additional dollar amounts were granted by many carriers during the 1940's. Then, in the 1950's, monthly guarantees were vastly improved by being placed on a flight pay basis, usually of sixty hours. In recent years, higher guarantees in relation to flight hour maximums have been negotiated at most carriers. At United, the present guarantee is seventy hours for pilots with a schedule, 81 hours for reserve pilots. The monthly guarantee is a basic floor of flight pay and credit and is another source of pay for time not actually flown.

As of 1960-61, it is my estimate, based on some representative data from a number of major air carriers, that most airline pilots were engaged in line flying about 60 to 65 hours per month and were being paid and credited for about 80 to 83 hours per month. Of the (roughly) twenty hours of average credited time not actually flown each month, about twelve were attributable to vacations, sick leave and training periods; three to four hours were being paid on the basis of the duty and trip ratios and the minimum guarantees per duty period; the "greater time" principle produced one or two hours of pay and credit for underflying; and two or three hours were derived from deadheading, reassignment rules, and the monthly guarantees. Actual line flying hours had been reduced by an average of about eight hours per month below 1950, and it is a conservative estimate that 1,500 of the 14,000 airline pilots employed in 1961 owed their jobs to these rules.⁷ Moreover, to the extent that relatively onerous schedules were unavoidable the affected pilots obtained corresponding reductions in actual flying hours without loss of monthly pay.

One related development affecting pilot wage determination needs to be mentioned here. During 1950-51, there was a general adoption for purposes of mileage pay and hourly pay of negotiated "pegged speeds" for each aircraft type. While these contractually specified pegged speeds have been crudely similar to the actual average speeds of the various models, the parties to pilot-carrier agreements came to accept "tinkering" with pegged speeds as a means of achieving specific effects on the structure as well as on the level of pilot pay. For

⁷ ALPA's Wage and Working Conditions Policy Committee, in its Second Interim Report dated February 8, 1960, held that "a return to the working rules of ten years ago would permit most airlines to furlough up to 20 per cent of their pilots immediately."

example, ALPA accepted a relatively slow pegged speed for the Boeing 707, when it was first introduced, in order to obtain better hourly rates (via higher pegged speeds) for the lowest-paid piston pilots.⁸ Actual earnings have often been changed by "agreeing" on a different speed for an aircraft type while leaving the rate structure otherwise unchanged. And in some instances, ALPA-carrier contracts have specified different speeds for hourly pay and for mileage pay for the same airplane!

IV. HOURS VERSUS EARNINGS

As noted earlier, the rapid activation of jet aircraft caused pilot employment to fall from 1961 to late 1962, and only in 1964 did it become clear that the airlines were again hiring pilots and that the number of pilot jobs was destined to keep increasing for the foreseeable future. It was in this changing employment context that the carriers and their respective pilot groups found themselves dividing into two camps in regard to pilot utilization; the American pattern (July 1963) of a flat reduction to a maximum of 75 hours of flight pay and credit per month; and the United pattern (January 1965), which not only retains the traditional 85-hour maximum but which permits earning pay for credited hours above this maximum.

A. *The 1963 American Pattern*

The Federal Aviation Agency (FAA), which determines safety requirements and crew complements, requires large aircraft to have a three-man crew of two pilots and a flight engineer. The FAA does not require the flight engineer to be a pilot, but ALPA policy since 1956 has been to insist that the flight engineer on jets must have at least a commercial and instrument (C & I) pilot rating. The Flight Engineers International Association (FEIA)—the union representing flight engineers at carriers where this group had been drawn from mechanically oriented non-pilot sources—insisted that the jet flight engineer have an aircraft and engine (A & E) mechanic license. American Airlines, in December 1958, anxious to avoid any work stoppage that would delay its activation of jets, announced that it would fly with a four-man crew, thus accommodating both ALPA and FEIA. Other carriers dealing with FEIA (including Eastern, Pan American, Trans World

⁸ "The State of the Association," President's Report prepared for the 16th Biennial Board of Directors Meeting of the Air Line Pilots Association (1960), p. 12.

and Western) followed American's costly example. At carriers where the flight engineer was pilot qualified, however, as at United, the jets were flown by three-man crews from the outset.

Contract negotiations between American and ALPA started in March 1961. American was determined to eliminate the "featherbird," but it was not willing to meet its pilots' economic demands and also provide C & I training to its six-hundred non-pilot engineers. In July 1962, the pilots' Negotiating Committee (composed entirely of American pilots) initiated a break with national ALPA policy by advising American that it would not require C & I training for non-pilot engineers on jets if American would grant its pilots' major objectives. American agreed, but ALPA would not permit this deviation from its established national policy. American's pilots then withdrew from ALPA and created a new independent union, the Allied Pilots Association (APA), to serve as their bargaining representative.

On July 9, 1963, American and APA signed a bargaining agreement which authorized a three-man jet crew that could include a non-pilot engineer. This contract abandoned the 85-hour monthly maximum for flight pay and credit and, effective on March 2, 1964, established a 75-hour maximum for turbojets and an 80-hour limit on propellor aircraft. The duty ratio was tightened to 1 for 2 on a scheduled or actual, whichever is greater, basis; minimum flight pay and credit per duty period was increased from three to four hours; and the trip ratio became 1 for 3.5 instead of 1 for 4. The minimum monthly guarantee was placed at 80 per cent of the applicable monthly maximum for the equipment at half-day and half-night rates. And all pilots on the seniority list as of July 1, 1963, were guaranteed full protection against both layoff and any pay loss deriving from the transition to three-man jet crews. In fact, there was no furlough problem because the hours and rules changes had been expressly designed to "create" the 280 jobs that were immediately at stake.

American agreed to provide the same pay for 75 hours on jets and 80 hours on propellor aircraft that had previously been given for 85 hours, and to contribute an additional nine per cent of each pilot's earnings to an improved retirement and disability program. And many pilots were to benefit very promptly from the upgrading opportunities generated by the cut in hours, which included 100 new first pilot jobs.

The American-APA example, as one would expect, became the pattern for other pilot contracts. ALPA and National adopted an

average 80-hour maximum on June 15, 1964; ALPA and Delta established a 75-hour limit for jets in their contract of July 1, 1964 (effective December 31, 1965); and ALPA and Trans World agreed on November 12, 1964, to move to 75 hours by December 1, 1966, at which time Trans World would pay for the 75 hours what it had previously paid for 85 and would make effective the same duty and trip ratios to which American had agreed.

Although not every ALPA contract signed between July 1963 and December 1964 provided a reduction in monthly flight pay and credit, it did appear that the path toward a 75 hour "pay cap" had been so well blazed that the rest of the industry would inevitably accept it. But the improving economic climate, evidenced by increased pilot employment in and after late 1964, set the stage for a significant change of pace initiated at United Air lines.

B. The 1965 United Pattern

The 1963 United-ALPA contract was scheduled to terminate on January 1, 1965. Intensive bargaining therefore did not take place until late in 1964, when United had already launched a substantial long-term pilot hiring program. This bargaining environment was a sharp contrast with the static employment and jet crew reduction faced by American in 1963. The new United-ALPA agreement, settled by direct negotiations on January 18, 1965, demonstrated that United's pilots, in the absence of any layoff worries, preferred higher earnings opportunities to an hours reduction and, in addition, were willing (for a price) to accept certain modifications on traditional seniority rights that would save United substantial training costs during the ensuing growth period.

United had proposed to keep its pilots' total duty hours and total trip (away from home) time within the limits imposed by American's duty and trip ratios, provided that the ceiling of 85 credited flight hours was not only retained but eased by an averaging or "banking" formula. American's 1 for 2 duty ratio times its 75-hour limit established a maximum of 150 duty hours per month. United therefore offered a duty ratio of 1 for 1.75, which times 85 hours establishes maximum duty time of 148.75 hours per month. American's trip ratio of 1 for 3.5 imposed a limit of 262.5 hours per month away from home. United offered a trip ratio of 1 for 3, which times 85 limits time away from home to 255 hours per month. Both of these ratios, effective

January 1, 1966, were on a scheduled or actual, whichever is greater, basis.

ALPA accepted this proposal, as well as a "pay bank" arrangement under which a pilot completes his monthly schedule even when this causes him to exceed 85 credited hours (provided only that he does not exceed 85 actual hours, which is the Decision 83 limit); the pay and credit above 85 in any month is banked, the credits to be drawn upon in subsequent months to bring lower pay and credit up to 85 hours' worth; and any "balance" as of each December 5 is paid off each December 15. The major significance of this pay bank is that it enabled United to increase by a full two hours per month (from 81 to 83) the average scheduled pay and credit of its pilots' monthly schedules.

The 1965 United-ALPA agreement also contains a major departure from the traditional pilot pay formula, namely: uniform pay within each of three equipment groups: large jets (DC-8 and B-720); small jets (Caravelle and B-727); and all propellor equipment (DC-6 series, Convairs, Viscounts). Within each group, the pilot is paid as if he is flying the type with the highest pay yield; but, in return, the pilots have agreed to forego the right to bid for other aircraft types within the same group at the same domicile (unless a promotion is also involved). United's net savings will be substantial, since, for example, the cost of transition training for an experienced three-man jet crew is about \$35,000 and the non-availability of the crew while training adds up to about \$15,000.

Pan American and its pilots had been engaged in serious bargaining since November 1963 along the lines of the American (and later the TWA) 75-hour precedent. But then the Pan Am pilots examined the new United-ALPA formula in January 1965, realized its earnings implications, and shifted course. While different in many details because of Pan Am's international route structure, the two-year Pan Am-ALPA contract signed on April 10, 1965, left the 85-hour limit intact. Negotiations at Eastern began nine days later, and Eastern's management immediately proposed "a United contract." Again, apart from differences in detail, the two-year contract signed by Eastern on July 30, 1965, was patterned on the United example.

Meanwhile, American and APA were again engaged in contract bargaining, and American warned that failure to obtain relief from the rigid 75-hour limitation it had granted in 1963 would, in view of the

spreading United pattern, jeopardize American's 1966 expansion plans and permit its competitors to acquire a larger share of the growing market. This argument—and, I suspect, the willingness of many American pilots to earn more money when the additional flight hours would not cause layoffs—was persuasive enough to produce a substantial relaxation of the 75-hour maximum for one year starting August 7, 1965. The relief is contained in a separate Letter of Agreement, somewhat camouflaged under the label of "Training Relief Duty Period" (TRDP). This permits American to schedule one duty period each calendar month for which the pilot is paid at regular rates "but for which he shall be given no flight time credit toward the applicable monthly maximum." A rose by any other name—TRDP in this case—still smells as sweet.

V. SUMMARY AND CONCLUSIONS

The U.S. Congress, in 1935, was persuaded by the Air Line Pilots Association to enact a pilot wage formula under which the minimum rate of pilot pay per flight hour was tied directly to aircraft speed. In 1947, with the arrival of larger (as well as faster) commercial aircraft, ALPA obtained from the industry an additional pay element based upon aircraft weight. The pilots have since utilized their bargaining power to retain these pay criteria as a floor for bargaining about the rates of pay per flight-hour for piloting new types of aircraft. During an era that has witnessed two massive waves of change in aircraft technology, this approach has provided a basis and a rationale for substantial increases in average pilot pay.⁹

Substantial inequities among pilots developed during and after the late 1940's, however, as a variety of faster and larger aircraft joined the DC-3 in airline fleets. Seniority practices created a situation in which the more junior pilots earned much less money under more onerous working conditions. The resulting pressures within ALPA led to a successful effort to attach flight pay and credit to non-flying components of pilot duty, thereby reducing the total duty hours and time away from home (but not the pay) of pilots with undesirable flight schedules. In addition, the application of negotiated "pegged speeds" has permitted some redistribution of earnings in favor of junior

⁹ As Arthur Ross has noted, the airline pilots are an "interesting exception" to his general conclusion that "productivity has not been a major explicit element in wage-making." Arthur M. Ross, "Productivity and Wage Control," *Industrial and Labor Relations Review*, Vol. 7 (January 1954), p. 180.

pilots. Nevertheless, there is still a wide dispersion of pilot earnings. In 1964, for example, the top-paid tenth of ALPA's captain members earned \$31,475 or more, while the bottom tenth of the captains earned \$16,043 or less. (The comparable figures for copilots were \$20,346 and \$6,826, respectively.)¹⁰ Pilots at the low end of the pay scale will benefit as less productive propellor aircraft are replaced by small jets; on the other hand, if present pay criteria are extended, as in the past, to the supersonic commercial transport expected in the 1970's, the captains of these Mach 2.8 aircraft would earn about \$100 per flight hour, about three times as much as the present DC-8 captain.

The recent and current developments affecting pilot working hours offer, I am convinced, an illuminating opportunity to analyze the income-leisure choice in a context of much relevance to the world of tomorrow, which is likely to have many organized employee groups with common job-oriented interests and real incomes comparable to today's airline pilots. My own analysis of the factors which are shaping changes in pilot work-time is still far from complete. In addition to the job-security context that I have mentioned, for example, I am examining other determinants of carrier attitudes (such as the impact of shorter hours on training and fringe benefit costs) and of pilot attitudes (such as the extent of non-flying moonlighting, compulsory retirement at age 60, progressive income taxation, and the impact of hours changes on the status and pay of less senior pilots). But I will hazard a forecast, applicable only to subsonic air transportation: that monthly hours of flight pay and credit will tend toward 85 in periods of expanding pilot employment, towards 75 in periods of declining pilot employment; and I will not be surprised if such arrangements are formalized by contractual provisions that establish hours of, say, 80 or 85, but with the proviso that no pilots may be furloughed until hours have first been reduced to, say, 70 or 75.

¹⁰ See footnote 4, above.

TECHNOLOGY AND THE LABOR FORCE IN THE OFFSHORE MARITIME INDUSTRY

AARON W. WARNER
Columbia University

This paper deals with some of the problems involved in attempting to modernize the U. S. merchant marine through the adoption of ship-board automation.

Technological gains so far have been limited to only a small portion of the American flag fleet. This is due to the discriminatory effects of the government's subsidy program, which has enabled only the shipping companies engaged in regularly scheduled established routes—the so-called liner fleet—to receive operating subsidies and ship construction subsidies for replacement of aging vessels. As a result the ships in this type of trade are modern and well-equipped, and have been able to compete successfully with their foreign rivals for this country's foreign trade. The newest ships in this service have begun to introduce certain automated features, including semi-automated power plants and devices permitting control of the engine room from the bridge. Existing contracts between the subsidized companies and the government for ship replacement have been modified to conform to these requirements.¹

The "tramp" sector of the American flag fleet, consisting of freighters, dry-bulk carriers and tankers which do not operate on regularly scheduled routes, has fared less well. In spite of the rapidly expanding bulk trade, the U. S. bulk fleet has undergone a sharp decline since World War II both in the percentage of the U. S. bulk trade carried in American bottoms and in the absolute amount of tonnage carried.² Without operating subsidies, and with mounting operating costs, the bulk fleet has been unable to compete successfully with foreign fleets; its ability to remain in operation is due mainly to the indirect subsidy provided by the government under the so-called cargo preference laws which require that in the case of certain types of

¹ See U.S. Department of Commerce, Maritime Administration, "Mechanization in the Maritime Administration Cargo Ship Replacement Program," 1964, pp. 1-3.

² U.S. Department of Commerce, Maritime Administration, "Changing Patterns in U.S. Trade and Shipping Capacity," December, 1964, pp. 14-15.

government-sponsored cargoes at least 50 percent must be carried in American bottoms.³ In the absence of construction subsidies, however, the owners of the bulk ships have been unwilling or unable to replace their vessels. As a consequence, the U. S. bulk fleet, which is for the most part still of World War II vintage, is faced with almost total obsolescence within a short time. The failure to modernize the U. S. flag bulk fleet is in marked contrast to what has been accomplished in other maritime countries, where much larger and faster vessels have been constructed. The new foreign flag bulk carriers and tankers generally have semi-automated engine rooms and other mechanized features, and carry reduced crews.⁴

The technological advances in the U. S. flag liner fleet have also resulted in reduced crews, and have been of considerable importance in improving the efficiency of the U. S. merchant marine. However, even with the existing state of knowledge, there is still opportunity for additional shipboard automation, as well as for other measures to increase labor productivity. Further simplification and automation of the power plant would reduce the need for engine room personnel. Installation of computers and electronic navigation devices would permit reduction of the deck crew. Other potential labor-saving devices and methods include the mechanization of mooring and line handling systems, the establishment of a unified maintenance department for engine and deck, the transfer of ship maintenance work ashore, the elimination of the radio officer as a separate activity, further advances in cargo care which would eliminate the need for supervision at sea, and the development of substitutes for meal preparation at sea.⁵ Because of shipboard automation that has already been introduced, crew sizes on the newer U. S. flag liner vessels have declined from between 46-52 men to between 35-40 men. Greater reductions in crews have been achieved on foreign vessels, and studies have indicated that it is technically feasible with modern equipment to reduce crew sizes on

³The basic law is Public Law 664 (46 U.S.C., Sec. 1241(b)), enacted in 1954.

⁴For a comparison of U.S. and foreign bulk cargo fleets, see Committee of American Steamship Lines, "The United States Bulk Cargo Fleet—Prospects and Problems," March, 1965, pp. 5-6.

⁵See U.S. Department of Commerce, Maritime Administration, "Mechanization in the Maritime Administration Cargo Ship Replacement Program," *op. cit.*, pp. 40-41. See also U.S. Department of Commerce, Maritime Administration, "Experimental Installation of Mechanization Features on a Subsidized Replacement Cargo Ship," *passim*.

medium-size freighters to about 17 men.⁶ It may be surmized, therefore, that the adoption of further shipboard mechanization will inevitably involve further reductions in crew sizes for American flag ships. The U. S. Interagency Maritime Task Force, for example, appears to contemplate a gradual reduction in average crew size for freighters in the subsidized liner service from 48 men to 27 men by 1985.⁷

In introducing shipboard automation on the newer ships, the subsidized companies have been responsive to increasing pressures from the Maritime Administration and other government agencies to reduce their operating costs. The question now is no longer one of when shipboard automation will be introduced, but rather the pace at which new technological advances will be adopted. This in turn leads to a consideration of a major remaining obstacle, namely, the problem of securing the cooperation of the maritime trade unions.

A major problem here is that the reductions in the size of the crews accompanying automation come on top of the loss of job opportunities in the maritime industry since World War II. The employment pattern in the industry has been one of considerable fluctuation within a sharply declining trend. From a wartime peak of approximately 160,000 jobs, the number of jobs has declined to an average of about 47,500 in 1964.⁸ In the absence of any change in existing subsidy programs, the trend will continue downward. In the light of this background, hesitation on the part of the maritime trade unions in accepting automation is easily understood. Moreover, because of the fragmented structure of the trade unions in the industry, the loss of jobs has been a source of bitter interunion rivalry.

⁶ U.S. Department of Commerce, Maritime Administration, "Mechanization in the Maritime Administration Cargo Ship Replacement Program," *op. cit.* For an interesting analysis of the potential gains from shipboard mechanization and work rationalization, see H. Benford, "Notes on the Design and Operation of Automatic Ships," a paper given before a seminar conducted by the International Institute for Labor Studies on labor problems resulting from shipboard automation in September, 1965, to be published along with the other papers and the proceedings of the seminar by Macmillan and Co. Ltd., in a forthcoming volume. See also P. B. Buck, "Technological Change and the Merchant Seaman," *International Labour Review*, October, 1965.

⁷ The Interagency Task Force on Maritime Policy, "The Merchant Marine in National Defense and Trade: A Policy and a Program," October 4, 1965, Exhibit 5, p. 1.

⁸ U.S. Department of Commerce, Maritime Administration, Division of Labor Data.

Until very recently, it was an open question whether trade union cooperation in permitting automation would be forthcoming. The industry found itself in a *cul-de-sac*. The trade unions refused to agree to a change in manning until there was actual experience with the new equipment in operation. The companies, on the other hand, refused to install automated equipment until the trade unions would commit themselves to accept the reduction in manning which the shipboard mechanization made possible. The deadlock was finally broken in 1963 when several of the subsidized lines secured agreements from the major unions concerned providing for a reduction in manning on the new semi-automated ships then under construction. The agreements were also extended to cover similar ships built in the future, as well as to vessels being modernized under a so-called "retrofit" program.

As encouraging as are these beginnings, they leave unresolved the question of manning of future automated ships. In the first place, the existing agreements are tentative, thus leaving open the possibility that after a period of experimentation the unions may claim that the nature of the work on automated vessels calls for additional manning. A second factor is that the agreements apply only to ships having similar characteristics to those under construction, not to new generations of ships embodying more advanced technology. Whether the unions will accept the further reduction in manning which new generations of ships would entail is still uncertain. A further consideration is that agreements on reduced manning have been reached only in the subsidized sector of the fleet. If the subsidy system should be changed, other sectors would become equally involved and manning agreements for automated vessels would have to be concluded with the unions representing personnel in those sectors as well.

The failure of the two sides of the industry to agree on a procedure to resolve manning disputes in regard to future generations of ships during the 1965 negotiations on the East Coast led to an impasse which resulted in government intervention at the highest level. The dispute was finally settled on the basis of a request by the President of the United States that the manning issue be made the subject of a joint study by the U. S. Secretary of Labor and the president of the AFL-CIO, in which all the maritime trade associations and all of the maritime unions were to be involved.⁹ The importance of the issue is highlighted by the fact that, in the light of more stringent require-

⁹ Statement by the President of the United States, August 16, 1965.

ments of the Maritime Subsidy Board for granting of construction subsidy aid, failure to agree on manning scales is virtually a bar to further ship construction. A final solution of the procedural problem of resolving manning disputes will require both short run and long run adjustments in the bargaining arrangements. The immediate problem is to establish machinery to facilitate agreement on the manning of the new types of ships, presumably through arbitration. Long run adjustments must necessarily be in the direction of focussing the attention of the parties on the more rational aspects of the manning problem. In the absence of productivity studies, manning decisions in the past have mainly reflected experience and compromise. With advances in technology, questions of cost savings and technical feasibility will become progressively more urgent. As experience elsewhere has indicated, the companies and the unions, with the aid of government, will have to join in conducting studies and tests, with some assurance that the results will find their way into the bargaining agreements. What is suggested here is a joint council on which all subsidized operators and trade unions would be represented. Availability of construction subsidy aid to operators of bulk carriers would greatly facilitate this development, since it would remove an important divisive element in the industry, both for operators and trade unions.

Restructuring the bargaining relationship on manning will not in itself, however, bring about an acceptance of the necessary reductions in crew size. Two further steps will be necessary in order to win the agreement of the trade union leaders. The first involves an expansion of the U. S. merchant marine. An expansion of the fleet, particularly if it involved the extension of subsidy aid to include a modern fleet of bulk carriers, would help to solve a number of the industry's major problems. In addition to easing the introduction of automation by relieving the pressure on manning it would also eliminate a major source of jurisdictional conflict, since much of the inter-union rivalry which has plagued the industry is a reflection of the differential loss of jobs suffered by the major competing unions. Expansion of the fleet, in turn, depends upon the government's subsidy policy, and must be decided in the light of strategic and military considerations as well as manpower and other needs. Subsidy costs will continue to be a limiting factor, since even under the most optimistic estimates of the cost savings that can be achieved through automation, American flag

vessels will remain more costly to operate than foreign flag vessels.¹⁰

The second step needed to gain trade union acceptance of further automation is to bring about a better balance between the available jobs and the size of the work force. This problem, however, must be seen in its proper perspective. Although there are fairly precise data concerning the number of jobs, the nature and size of the labor force are more difficult to analyze. The potential supply of qualified and experienced men has for many years exceeded the estimated number of men needed by a very large margin. As of July 1, 1959, the number of men holding seamen's papers, according to U. S. Coast Guard records, was approximately 250,000.¹¹ This, however, is not an accurate indication of the number of men available for employment. A U. S. Department of Labor study of the maritime labor force for the period July 1, 1956 to June 30, 1957¹² showed an active labor force of 85,541 licensed and unlicensed seamen employed to fill an average of 57,926 jobs. But of this active group, 24.5 percent were casual workers. There was also a considerable dispersion of employment among the regular, or "industry-connected" seamen. It is apparent, therefore, that estimates of available manpower must take into account the degree of attachment of various groups to the labor force in addition to any calculations of the surplus of manpower for the available number of jobs.

Later investigations have indicated a worsening of the employment situation. The National Academy of Sciences, with data obtained from U. S. Coast Guard records, has recently made a study of all seamen who sailed under Coast Guard articles on American flag vessels between April 1, 1962, and March 31, 1963.¹³ The study indicates that the ratio of the active labor force to the number of jobs is approximately 2 to 1. This, however, is subject to several important quali-

¹⁰ Current studies indicate that it is not possible to project a vessel that can under present conditions operate profitably in the world market without some form of government aid, even after 50 percent construction subsidy. See for example the study by D. M. Mack-Forlist and Ran Hettner, "Bulk Carriers: Design and Feasibility Study," to be published in *Marine Technology*, April, 1966.

¹¹ National Academy of Sciences—National Research Council, "The Role of the U.S. Merchant Marine in National Security," Publication 748, 1959, p. 51.

¹² U.S. Department of Labor, Bureau of Labor Statistics, "The Earnings and Employment of Seamen on U.S. Flag Ships," Bulletin No. 1238, November, 1958.

¹³ National Academy of Sciences—National Research Council, Maritime Cargo Transportation Conference, "Combined Minutes of the Consulting Panel Meetings for the Shipboard Mechanization and Manpower Study, 1964," March, 1964, tables 1 and 2, pp. 32 and 34.

fications. One is that there can be considerable fluctuation in the number of jobs available, depending on the emergency needs of the government. Under present circumstances as a result of the Vietnam crisis, vessels carrying government-sponsored cargoes are finding it difficult to staff all positions. Another qualification is that what appears to be an excess of personnel in certain categories is in fact merely the existence of large numbers of men whose connection with the industry is only casual. Thus, among the licensed officer groups, the engineers, with a surplus of trained men, are really in short supply. Even in normal periods, ships not infrequently must sail without their full complement of engineers, and in periods of emergency this shortage becomes critical. The major problems of surplus labor exist not among the licensed groups but rather among the unlicensed groups other than stewards, and particularly the less-skilled workers for whom shore-side opportunities are not easily available.

Of further importance in estimating the labor force is the evidence concerning entry into the industry and attrition rates. Analysis of the distribution of the labor force by year of entry indicates that most of the radio, deck and engine officers joined the work force either during World War II or during the Korean War. Of the men employed in these categories during the period from April 1, 1962 to March 31, 1963, only 13 percent of the deck officers, 9 percent of the licensed engineers and 6 percent of the radio officers had entered the industry since the end of the Korean conflict. Among the unlicensed personnel, on the other hand, the entry of new men into the unskilled categories had been fairly substantial, although the skilled categories among the unlicensed personnel have a higher average age and show a much reduced rate of recent entry.¹⁴

In conjunction with these low recent entry rates, the net attrition rates for the various groups have been found to be relatively high. On the basis of actual changes that occurred in the labor force between 1959 and 1962, the National Academy of Sciences has estimated that net attrition rates for deck officers, engineering officers, unlicensed deck men and unlicensed engine men average approximately 5 percent per year. On the basis of this estimate, projections made for the labor force indicate that by 1972 all of these groups will be reduced to

¹⁴ Ibid.

approximately one-half of their 1962 size.¹⁵ The overall picture that emerges is one of an aging labor force, in large part recruited to meet the expanded needs of the fleet during World War II and the Korean War, and with large segments rapidly approaching retirement. Attrition, if unchecked, will intensify these trends and result in an inadequate supply of trained officers willing to go to sea. At the same time, although attrition will also have reduced the unlicensed ranks, as a whole these categories are filled by younger men, and are thus more likely to remain in oversupply, especially in the lower-skilled rankings.

It thus becomes apparent that the solution to the labor surplus problem lies not merely in fleet expansion, but more importantly in manpower planning. This is made more urgent by the introduction of automation, which intensifies the existing imbalance by further reducing the jobs for the unskilled, who are at present in greatest oversupply, while at the same time placing a premium on highly trained personnel, who will increasingly be in short supply. Manpower planning so far has been haphazard in character, consisting mainly of defensive measures taken by the unions to deal with the problem of declining job opportunities for their members. Over the past decade, for example, pension benefits have been greatly improved. Training and automation funds have also been established by some of the unions. These arrangements, coupled with additional employment opportunities arising from expansion of the fleet and measures to improve the distribution of manpower, should assist the industry in coping with technological displacement.

On the basis of the considerations discussed above, it becomes possible to consider policies that will restore a proper balance between manpower needs and the existing labor supply. The major limitation to expanding the fleet, even an automated one, is the imminent shortage of licensed personnel. Any present oversupply of manpower among the licensed officer groups will be self-correcting within a relatively short time because of attrition and lack of new entry. The major problem will then become one of recruiting and training new officers for the increasing number of automated ships. The situation for deck officers is somewhat paradoxical. Although this group has the highest attrition rate and will rapidly become inadequate for future needs, the

¹⁵ National Academy of Sciences—National Research Council, Maritime Cargo Transportation Conference, "Minutes of Board Meeting, November 24, 1964," pp. 11-12.

presence of older men on the shipping list has blocked the entry of younger recruits. As a result, those trained as deck officers in the various maritime academies must look elsewhere for careers. The shortage of licensed engineers, which already exists in fact, is due to another set of factors. Because of the availability of engineering jobs ashore, many engineers prefer shore-side occupations to the rigors of shipboard life. The training of engineers in the maritime academies is sufficiently broad to equip them for engineering positions in industries other than maritime. To attract the caliber of men needed as chief officers on the new technologically advanced ships, and to retain them in service, will require more than financial inducements. In view of the many opportunities ashore for highly trained personnel, attention will have to be given not only to training, but to career opportunities within the maritime industry, including opportunities for further study and perhaps for a continuing career after the initial 20 year period of shipboard activity leading to retirement has been served. This may require the establishment of a definite career pattern for advancement from service aboard a ship into managerial or professional positions in the shore-side operations of the industry. In addition, it may become necessary to admit a larger number of potential officers to the maritime academies, and also to modify the curriculum to include the teaching of managerial and technical skills that will be needed on automated vessels.

With the shortage of officers as a limiting factor, any transition to a larger fleet will necessarily be gradual, even apart from the need to build new ships. In the meantime, there remains the difficult problem of the oversupply of unlicensed men, particularly among those who are less skilled. To the extent possible, this group should be permitted to grow smaller through attrition, since shipboard automation will inevitably reduce the number of unskilled jobs regardless of the size of the fleet. It may, however, be necessary in addition to take positive measures to reduce the size of this group, including the hastening of retirement for older men and the retraining of younger men for possible transfer to shore-side jobs. One possibility is that a part of this labor force can be shifted to maintenance work ashore. Once the proper balance of men to jobs in this category has been achieved, it will then be possible to establish a rational policy for admitting men to the industry as they are needed, with suitable provisions for training and promotion.

A further opportunity for balancing the labor force exists in the promoting of unlicensed men to become licensed officers. One important reason for the low entry into the licensed officer categories is the falling off in the number of men who come up through the ranks. At the same time, many of the positions filled by licensed officers do not require the degree of training obtainable in the various maritime academies. By encouraging and reinstating the practice of promotion from the unlicensed to the licensed categories, a further solution is offered for resolving the problem of any surplus labor among the unlicensed groups. It is also probably the most effective method for securing the needed supply of officers.

Advances in shipboard automation will also require changes in existing trade union functions and structural arrangements. One of the major problems in the adjustment of the labor force will be the provision of adequate training facilities. This is true of both the licensed and unlicensed groups. For licensed officers who have not recently graduated from one of the maritime academies, special training will be required in the operation and maintenance of the new types of equipment. Training will also be needed for men who seek promotion from unlicensed to licensed categories, as well as for unlicensed men who wish to be upgraded to new unlicensed positions calling for greater skills. Much of this training will have to be undertaken by the unions themselves, with financial assistance wherever possible coming through automation funds or through the use of government manpower retraining funds. A number of trade unions, aware of this need, have already moved to provide special training courses for their members.

In addition to undertaking these training functions, the unions may also find it necessary to work out inter-union arrangements to facilitate the upgrading and promotion of their members. The problem here is the current lack of any provision for transferring pension rights from one union to another. In the absence of arrangements for the vesting of pension credits, unlicensed seamen will continue to be indifferent toward promotions for the reason that this entails moving *de novo* into another pension scheme. The ultimate solution to this problem may be a unified pension plan for the industry as a whole. More immediate measures would involve inter-union arrangements for accepting pension credits already earned elsewhere, with appropriate financial adjustments among the unions.

Another major problem confronting the maritime trade unions

relates to the impact of shipboard automation upon traditional job classifications. Further automation of the engine room, for example, might well eliminate the present functions of the engineering officers. One view is that the deck and engineering officer classifications should be combined and future deck officers trained to perform both functions. In anticipation of this contingency, the U. S. Merchant Marine Academy has begun experimentally to train a group of such "omni-competent" officers.¹⁶ Another view is that only trained engineers will be able to handle the complicated equipment on an automated ship.

The question resolves itself into one of the degree of technical competence necessary to maintain and repair the type of equipment future automated ships will carry. It is dubious that major repairs of highly sophisticated types of automation equipment can be made at sea. More likely there will be standby equipment which will enable a ship to reach port where the necessary repairs can be made. Under these circumstances, with further reductions in manning, the eventual combining of licensed deck and engineer personnel into a single operating category would seem to be inevitable. This would support the contention that future licensed officers for automated ships should be trained for both navigational and technical skills. If this were in fact to occur, the consolidation of the existing licensed officers' unions into a single comprehensive union, which would appear to be a desirable development in any event, would most likely follow. Similar consolidations among the unlicensed personnel may also result, especially with the combining of deck and engine room maintenance.

What is involved here is a new concept of ship operation. The new automated equipment cuts across the traditional departmental divisions. The jurisdictional problems which ensue complicate the development of an efficient crew organization for the new type of ship organization that is needed. The logic of the situation calls for a single officers' union and a single industrial union of unlicensed seamen, with reciprocal arrangements for the transfer of pension rights. This would make possible the simplification of hiring arrangements and the proper adjustment of the available manpower to the needs of the industry. Although consolidation of the separate trade unions probably will not occur in the immediate future, the working out of joint arrangements, as has been suggested, will be a move in this direction.

¹⁶ Alan F. Schoedel, "New Training Project Planned," *New York Journal of Commerce*, July 23, 1965.

Whether or not these changes can take place through collective bargaining remains to be seen. The more equitable distribution of subsidy aid and the expansion of the American merchant marine, when and if they occur, will make more likely the cooperation of the trade unions in solving the maritime industry's problems, including the need to adopt more advanced technology. But technology, in turn, has a structural impact. By shifting the emphasis from the older craft to the newer functional needs, it leads to the reshaping of the existing craft-oriented unions along industrial lines. The decision to accept automation inevitable leads in this direction. That it will come about through a series of interim arrangements and over a span of time will not alter its long run implication.

DISCUSSION

R. THAYNE ROBSON

The President's Committee on Manpower

The two papers under discussion provide an opportunity to compare and contrast two quite different situations in the transportation industry. At the same time they provide us with another example of a weakness in much of what is said and written about technological change. Technological change too frequently becomes the short hand explanation for a whole variety of developments within an industry. These two papers, like so many written in recent years, fail to tell us precisely how the forces generated by technological change relate to other market and power forces which control the destiny of an industry and its labor relations. I should not be surprised if Garth Mangum encounters a similar difficulty in ascertaining precisely what it is that the 14 members of the National Commission on Technology, Automation, and Economic Progress are prepared to say about the impact of technological change. I do not know precisely what either Kahn or Warner are saying on this matter.

Kahn's paper provides an adequate description of the current formula determining the pay for airline pilots, and provides a limited historical description of how each component in the formula has developed. Kahn seems to credit technological change, government intervention, rapid industry growth, and skillful bargaining on the part of the airline pilots for achieving results which he regards as highly favorable to pilots. Since this explanation implies that airline management has been less skillful and nor faired so well, it would have been appropriate to explore in some depth both of these points. We are not told how the rising productivity of the industry has been shared between management and labor, nor have we been given any insight into the frequent allegation that airline pilots have benefited from bargaining with a management made up of former pilots. If the facts were available, I suspect that it could be successfully argued that the airlines have faired equally well during the period under discussion.

No attempt has been made to account for the specific influence of technological change in explaining the rapid growth of the industry, the financial ability of the industry to reward its employees, and the attitudes and policies of management in labor negotiations. One learns

very little about changes in job content associated with changing technology and changing pay levels, or about the relative position of pilots in the total airline wage structure.

The discussion of the work-leisure choice associated with a temporary reduction in employment opportunity is very interesting. It seems to confirm most of the evidence found elsewhere that work and income are preferred to leisure when workers are confronted with a realistic choice.

Aaron Warner's paper provides an excellent description of the general problems facing the maritime industry and introduces his extensive research plans relating to the industry. He argues that automation and technological change are reducing the manpower needs of the industry and giving rise to serious labor disputes over the attendant problems of adjusting manpower supplies to current needs. The U.S. maritime industry is declining primarily due to inroads made by foreign competition. The future of the U. S. maritime industry depends to a very large degree upon Federal policy in subsidizing and supporting the industry.

Warner is not quite explicit in assigning to Federal policy responsibility for the surplus manpower pool attached to the industry. The clear implication of his paper is that the subsidy policy pursued since 1936 financed rising wages and fringes—especially liberal pensions—and improved working conditions, all of which served to attract and retain more job seekers than there were jobs. Federal support of higher wages etc. continued after it became clear that existing wage levels served to discourage workers from leaving an industry where total job opportunities were declining. While this seems to be the general picture, we learn that there are possible shortages of some licensed groups particularly maritime engineers.

The uncertainties in the total situation make it difficult for management and unions to reach agreement over the key issues relating to manning and crew size. Groups advising the Federal government disagree over the extent to which Federal subsidies should maintain the present size of the U. S. industry in face of a foreign competition that threatens to take over a much larger part of total shipping, even if U.S. companies rapidly put into service the most automated ships presently available.

Warner suggests a new mechanism based on arbitration as the terminal step to decide disputes over manning and crew size. He suggests

that such settlements must be tied to careful studies of changing productivity and costs. Here his interest in promoting labor peace prevents him from facing the basic question regarding the desirability of using cost reductions in an industry over-supplied with manpower to reducing prices to shippers as a means of meeting foreign competition. Productivity increases will likely be shared by some increases in wages, some compensation for displaced workers, and hopefully some reductions in the prices paid by shippers.

The complex craft union structure of the maritime industry serves to reduce flexibility in making work assignments that could accommodate declining total employment. One of the most interesting facets of this industry is the opportunity to study union policy and examine in detail those forces which determine the policies of unions in adjusting to change. Interesting comparisons could be made with the railroad industry, a similar case of declining employment opportunity. There is some evidence that one or more maritime unions might promote programs to train and retrain displaced workers for other jobs within the industry, or for jobs outside the industry. Too few unions have taken the lead in aiding displaced members in this manner. A careful study should be made to see what steps both unions and management might take to facilitate the adjustment of manpower supply to present and anticipated demand.

There are additional contrasts between the two cases. In the maritime industry, rising efficiency is needed to meet foreign competition. This is not a serious problem in the airline industry which is largely isolated from foreign competition. An interesting paper could be written comparing the role and impact of governmental policy on two segments of the transportation industry. Had the government spent money on research and development in the maritime industry at even a fraction of the level spent on air transportation, the position of the maritime industry might be somewhat different today. The airline industry has accommodated tremendous technological changes affecting all classes of workers without serious displacement.

In summary, these two papers add very little to our knowledge about the process of adjustment to technological change. They suggest no new hypothesis to test, and no new explanations are given for past and present developments. What we are given is two interesting case studies at an early stage of analysis.

ROBERT S. BOWERS

Western Michigan University

The Secretary of Labor in his Manpower Research and Training Report for 1965 pointed up the need for specific studies at the industry and plant level on the effects of the introduction of technological innovation. Such studies, he suggested, should analyze productivity trends, techniques, costs and benefits of adjusting to technological change. These two papers by Professors Warner and Kahn make a worthy contribution to this needed research.

Professor Kahn, who has been observing industrial relations in air transportation for many years, brings us up to date as regards the pilots. My comments will be directed chiefly to his paper.

Confronted with the disturbing effects of technological change, management and workers—both unorganized and organized—have reacted in a variety of ways. Fortunately, two styles of response have largely disappeared: modern management is no longer indifferent to the effects of job displacement on the worker, and workers do not express their frustrations by throwing their wooden shoes into the machinery. Other reactions, nevertheless, are firmly expressed.

Union responses to technological change may run from encouragement through acquiescence, adjustment and competition to outright opposition.¹ But whatever their response, unions are attempting to preserve jobs. Management, on the other hand, seeks to maintain the maneuverability which will permit greater efficiency. Thus, a tension results which somehow must be reconciled. What policies have the airline flight crews used to facilitate this reconciliation? Have they retarded or advanced the rate of change? How have they affected the social cost of the change?

It would appear that the flight crews have steered a course somewhere between acquiescence and adjustment. The carriers have been left free to increase productivity through introducing new equipment, but with carefully circumscribed conditions of employment.

What methods have unions and management used in adjusting to technological change? They are attrition, early retirement, retraining, transfer, relocation allowances, work-spreading devices, severance pay, supplemental unemployment benefits, vesting of pension rights, and

¹ Sumner H. Slichter, James J. Healy, E. Robert Livernash, *The Impact of Collective Bargaining on Management* (Washington, D.C.: The Brookings Institution, 1960) p. 334.

placement services.² Flight crews have used some of these methods. The methods are basically determined by the economic, institutional, and technological environment of the company and industry.

When Professor Kahn points out that the high productivity increase of 7 percent per year was more than offset by a rise in traffic and consequent pilot employment, he is bringing out a unique economic feature of air transportation. According to the 1964 Manpower Report of the President, no industry division with a productivity gain averaging 2.5 percent per year or more in 1957-62, achieved sufficient increase in demand to prevent a reduction in employment. Another important economic fact is that labor cost represented by flight deck employees is only a small fraction of total operating costs—about 10 percent. These favorable characteristics have certainly influenced the methods of adjustment used by both airline labor and management.

Professor Kahn presents a most thorough analysis of the pilots' response to technological innovation. Yet, as he says, the other two groups in the flight deck personnel, the flight navigators and the flight engineers, have felt the impact of technological change even more sharply. The flight navigator has been almost completely displaced. The flight engineer has found many of his control functions either performed automatically or eliminated entirely. A brief comparison of the methods of adjustment employed by these two groups may help to highlight the reaction of the pilots. Recent agreements of the navigators and engineers contain provisions relating to gradual layoffs, severance pay and retraining.³

Trans World Airlines and the Airline Navigators Association agreed in 1961 to replace navigators with automatic equipment. Navigators were not to be laid off until seven months after the Federal Aviation Agency had approved their replacement by new equipment and not until four months after TWA had agreed with the Air Line Pilots to replace the navigators. Some navigators were to be retrained on piston engine planes until January, 1965. Displaced navigators were to receive severance pay ranging from \$10,000 to \$25,000, according to length of service, in addition to an amount equal to \$400 per

² Derek Bok and Max D. Kossoris, *Methods of Adjusting to Automation and Technological Change*. Prepared for the President's Committee on Labor-Management Policy (Washington: United States Department of Labor, n.d.) p. 1.

³ *Recent Collective Bargaining and Technological Change*, U.S. Department of Labor, Bureau of Labor Statistics, Report No. 266, March, 1964, pp. 7-9.

month for three years. The maximum payment would be \$39,400. Navigators have severance pay in all of their contracts.

TWA signed a contract in 1962 with the Flight Engineers' International Association which gave engineers on the seniority and the furlough lists prior rights to the third seat in the jet cockpits. The engineers may acquire pilot training at company expense and they have a severance pay plan similar to that of the navigators except that severance benefits are reduced for engineers who resign after receiving pilot training. Engineers who choose not to take pilot training, or who are unable to qualify become eligible for severance pay. The secretary-treasurer of the engineers' union reports that as of December, 1965, no flight engineer has failed to pass his pilot training, which usually required about four months. Since no flight engineer has yet failed the course, this training program has not encountered certain problems, such as lack of necessary intelligence, aptitude, and formal education experienced by other plans. Severance pay provisions were found in 30 percent of agreements in general in 1963. Both navigators and engineers who accept severance pay may elect to participate in pension plans, company insurance programs, and travel privileges.

The striking feature of these pay plans for navigators and engineers is that the amounts greatly exceed those in most other plans, whose benefits range from 1 day's to 3 weeks' pay for each year of service. United Air Lines claimed that their severance payments would amount to \$680,000, but considered this a good investment. Certainly more follow-through is needed on these retraining and severance pay programs. For example: what has happened to the displaced navigators? What proportion of the engineers has taken the training program? Has the cost of severance pay affected the rate of the introduction of new technology?

Although pilots have secured severance pay provisions in some of their agreements, their preference in the face of increasing employment, as Professor Kahn reports, is to stress earnings and working conditions rather than severance pay. And during periods of declining employment they have tightened their work rules.

Another issue has been the modification of the job content, and this, surely, has created one of the less creative adjustments in the industry. The controversy involves both union security and job security. The conflict in the cockpit as to whether the third man should be a pilot or an engineer was settled by hiring an expensive fourth

man. The cost of this arrangement for just three companies was estimated to be over seven million dollars. Later, when the pilots were assured full protection against layoffs and loss of pay, the fourth man was dropped. A possible solution to this problem would be to train an "omni-competent" crew capable of performing both functions, a solution Professor Warner cited as suggested for a similar problem faced by deck and engineering officers.

The recently improved economic climate for the airlines has permitted more creative responses on the part of both unions and management. From what Professor Kahn states, the United-ALPA agreement seems to involve a good blending of management maneuverability and employment stability. The uniform pay formula for the three basic equipment groups permits the airlines more flexibility in scheduling pilots; and pilots are free to select the more desirable work schedules. The companies save expense in training. The paybank plan is quite an ingenious provision similar, it appears, to the old Hormel plan. Perhaps this agreement is an example of the bold, imaginative bargaining which Secretary Wirtz has called for.

The experience of the airlines shows that collective bargaining can be a fairly effective instrument for working out direct and specific methods for charging some of the human costs of technological displacement against those who benefit from it, by applying some of the gains from increased productivity to easing the adjustment process. Such private methods of adjustment are facilitated, of course, by government policies which maintain full employment and stimulate growth. Collective bargaining would be even more effective if studies were now conducted to provide early warning of the impact of productivity trends, occupational shifts, and training requirements occasioned by the introduction of supersonic air transportation.

JOHN R. COLEMAN
The Ford Foundation

These papers raise significant questions about the purpose of our annual IRRA-AEA meetings.

Professor Kahn's paper throws into sharpest focus the question, "When is a research report ready and appropriate for presentation at

a formal meeting such as this one?" The story which he tells is one that amply documents labor's (if the Airline Pilots Association will forgive the word) and management's ingenuity at the bargaining table. Successive waves of technological and economic change have not found these parties wanting. Not only have they developed increasingly complex formulae which employ the yardsticks of hours, distances, weights, inconveniences, and seniority to arrive at acceptable wage bargains; but they have also been willing to change the yardsticks themselves, as in their bargaining decisions on the speed at which the big jets fly, when the results were otherwise unacceptable.

So we have ingenuity on a grand scale. But where is the learning value here? What do we now know that we can apply elsewhere because we saw the pilots and the airlines tinkering with formulae to keep the planes in the air?

One interesting lesson might have been found in tracing the roots of the pilots' unusual bargaining power. But Professor Kahn gives this lesson short shrift in a single paragraph of seven summary points. Another lesson might have been in the area of income-leisure choices. But we are told that this story is yet to be told. The paper thus leaves us with description and a teaser or two, not with implications.

Professor Warner's story is a more interesting one and he is more willing to pose some of the critical questions which flow from it. For example, he provokes thought on the issue of a transfer from crafts to functions in maritime work, on the impact of technology upon personnel recruitment and retention alike, on the appropriateness of collective bargaining mechanisms for achieving meaningful manpower planning, and on the adaptability of labor's institutions to new circumstances. Public policy implications too leap from Warner's analysis; the search for a balance among the goals of individual security, progress, economic rationality, national security, and just keeping the peace looms large in all that he tells us. The paper, in short, is an example of good sense in weaving together the times, the men, the institutions, and the public policies.

Economists need no further reminders that resources—including time at IRRA-AEA meetings—are scarce. To what end shall these resources be used? Perhaps we should insist as a minimum that each meeting be shaped so as to raise more questions than it can answer. Certainly the meetings ought not to be used for mere description, however skillfully done, especially if what is described is seemingly of

limited relevance to the issues which challenge us most deeply. Unless we leave a meeting more anxious to test new hypotheses, to prove or disprove old ones, or to develop new tools for still further applications on important questions, the meeting has served little purpose.

If the consequence of applying more stringent tests before papers are finally accepted for delivery at these meetings is that fewer meetings are held, so be it! We should be able to live with that result.

VI

**CONCEPT ANALYSIS IN INDUSTRIAL
RELATIONS**

Milton Derber, Chairman

CONCEPT ANALYSIS IN INDUSTRIAL RELATIONS

MILTON DEBRER

Institute of Labor and Industrial Relations, University of Illinois

The vitality and significance of any scientific field of knowledge depend in large measure on its key concepts—the ideas which are held about the comparatively small number of central classes of things, activities, and relationships of the field. If these concepts are in tune with the dynamic elements of the field, they will illuminate activities and relationships, will contribute to the development of theories and principles, and will guide the practitioners toward policies and decisions of a creative, realistic nature. If, on the contrary, the key concepts have become stale or obsolete in relation to the changing conditions of the field, their role in both theorizing and problem-solving is bound to be slight, if not actually detrimental. Indeed it may not even be possible to identify the problems correctly, to ask the right questions.

The tests of adequate conceptualization are threefold:

1. *Relevancy*. Does the idea expressed in a concept relate in a meaningful way to important problems in the field? Perhaps it might be well to add the supplemental test of *continuing relevancy* to emphasize the need for changing as well as new concepts in keeping with changing conditions.
2. *Definitional clarity*. Is the concept defined with sufficient clarity and precision so that its meaning is understood by all of its users? It would be unrealistic to expect universal agreement on the definition of particular concepts, but each definition should be crystal clear even to those who reject it.
3. *Operationalism*. Is the concept defined in such a way as to permit it to be studied empirically? If a concept is so abstract that it cannot be used, directly or indirectly, as an investigational tool, its utility in the field may be seriously questioned.

As a multi-disciplinary field, industrial relations has been the beneficiary of conceptualization in the several social sciences. The economist's concepts of the labor market and productivity, the sociologist's concepts of class and alienation, the psychologist's concept of job satisfaction, and the political scientist's concept of pressure group are ill-thought and have pretty well met the three tests listed above. But the

trations of ideas which have served valuable roles in industrial relations industrial relations field has had to develop additional concepts which are uniquely applicable to its problems and which have given the field its distinctive character. It is these concepts which are critical to the growth of the field. A number of examples can be readily identified:

- collective bargaining
- the labor agreement
- bargaining power
- the appropriate bargaining unit
- union democracy
- wage guidelines
- industrial relations system
- business unionism
- job security
- management rights

As one examines these concepts, and others like them, in relation to the three tests, it soon becomes clear that there are numerous weaknesses and limitations in the way the literature treats them. Concepts appear to have a distressing habit of becoming dated. The same term often gains a very different set of meanings over time. Many concepts are defined in ambiguous language. Agreement on definition is often absent. Operational definitions useful for field study are even more rare.

Take, for instance, the concept of management rights or "management prerogatives" which has been so extensively discussed in the literature. Neil Chamberlain, who has thought about the subject as much as anybody, notes that most students and practitioners have approached this concept in terms of function or process concerned with decision-making and have seen unions, for better or worse, as invaders of managerial authority in this process. He identifies four different interpretations of this approach. However, he himself rejects these views of management as the decision-maker and argues instead for a management role which *coordinates* the bargaining among the various interest groups in the enterprise concerned with particular problems or decisions and which thereby maintains the organizational integrity of the enterprise.¹ In a somewhat related way Margaret Chandler proposes to discard the property-based rights concept in favor of one

¹ See his *Labor* (New York: McGraw-Hill Book Co., 1958), Chapter 12.

dealing with organizational process—"to move from management as a keeper of property to management as a promoter of process."² Clearly, we have a concept in a state of ferment, one that requires not only much hard thought but also empirical investigation to test hypotheses which are based on varying interpretations.

Or take the concept of the appropriate bargaining unit, which many students and practitioners regard as the most important single subject within the jurisdiction of the National Labor Relations Board. Prior to 1933 when Senator Robert Wagner introduced the idea of determining union representation by majority vote, the appropriate bargaining unit was determined mainly by impersonal factors such as union structure, union and employer bargaining power, and competitive factors in the product and labor markets. Since the 1930's an important element of rational decision by a governmental agency has been added to the earlier determinants. The term "appropriate" has now assumed a new significance not only because the perspectives and values of the government agents may be different from those of management and union leaders, but also because the very presence of the governmental agency affects the judgmental process of the parties. In studying this concept, the academician cannot simply substitute his own value system in place of those of the three parties. He must develop, it seems to me, alternative sets of criteria of "appropriateness" which can be translated into operational terms and then test these criteria or hypotheses derived from them (in connection with other relevant concepts) by the collection of pertinent field data. The literature contains a good deal of descriptive material on bargaining units, but very little analytical treatment of the concept.

Finally, consider the concept of union democracy. There is a vast amount of theoretical literature on the subject of democracy, mainly by political scientists and philosophers, as well as a fair number of both theoretical and empirical studies of union democracy. All students are aware of the ambiguities inherent in the concept, yet few would gainsay that the concept contains some vital ingredients which cannot be ignored by either students or practitioners. Shall we discard the concept and seek for some substitutes which are more tractable? Or shall we devote more effort to redefinition and to empirical investigations which flow from the new definitions? Whichever step we take is

² *Management Rights and Union Interests* (New York: McGraw-Hill Book Co., 1964), pp. 3-6.

bound to affect future thought and policy-making on the subject because the concept which is adopted will, in conjunction with other concepts, help shape the theory which is developed and the actions which will flow from it. Mason Haire recently made the penetrating remark that the measures which we make of an institution determine its behavior. Implicit in this remark was the thought that what we *conceive* as important to measure will be the motivating force in our efforts to achieve institutional goals.

Because of considerations like the foregoing, it seemed highly desirable to present the issue of conceptualization to the members of the Association. We have selected only three concepts for discussion—job consciousness, bargaining, and seniority—but they appear to reflect well the wide range of problems involved. The first is a subjective, psychological concept inherent, in varying degrees, in individual workers. As Professor Siegel has noted, it can be attributed to an “inventor,” Selig Perlman, who used it as an analytical tool in the construction of his theory of the labor movement. The concept of bargaining symbolizes a much more general dynamic process which has meaning far beyond the bounds of the industrial relations field but which has achieved an exceptional significance in the field. It is determined, but not defined, by the practitioners. Seniority, in contrast, is a static descriptive concept defined by the practitioners themselves in a variety of ways.

The discussants were given the following questions as guides, but of course were free to treat their concepts in any way which appeared to be most stimulating and enlightening. It is hoped that these questions and discussions will lead to greater consciousness in the profession as to the central role of effective concepts in the development of the field.

1. What are the problems of performing a proper analysis of the concept?
2. What are the implications of various interpretations of the concept for theory and policy?
3. From a research standpoint has the concept been expressed in adequate operational terms?
4. Does this concept have further potential in the development of understanding in the field or should it be discarded?
5. If the answer to (4) is affirmative, in what direction should the concept be turned?

THE EXTENDED MEANING AND DIMINISHED RELEVANCE OF “JOB CONSCIOUS” UNIONISM

ABRAHAM J. SIEGEL

Massachusetts Institute of Technology

What, looking backward, have been the meanings given to the concept, “job conscious unionism,” in the industrial relations literature? What, looking about and ahead, are the contemporary and potential uses of this concept in the further development of either labor histories or analysis? These are the questions examined here.

THE MEANINGS OF “JOB CONSCIOUS” UNIONISM

In the beginning there was the word. And the word was with Perlman. And it was indeed quite clear. A cursory sampling of pre-1928 materials failed to turn up a specific reference to “job consciousness” and in turn to the “job conscious” union. Hoxie’s posthumously published lectures [2] included, of course, the oft-cited typology of American unions which included the “business” union, a close forebear of “job conscious” unionism. There were also references to “philosophies of no philosophy” in describing the American Federation of Labor’s ideological touchstone [e.g., 1, 3, 5]. But there were no explicit citations or sustained discussions of the concept which was so vividly introduced by Selig Perlman in his *A Theory of the Labor Movement* [4]. Neither the then standard texts nor histories dealt in depth with the concept of a “job conscious” union. There were bits and pieces and there were ideas in gestation. The phrase itself and the “full-term” concept are both Selig Perlman’s.

The underlying *explanation* and *derivation* of the concept have come in for their share of brickbats between 1928 and the present. So have Perlman’s assertions concerning the *universality* and *general applicability* of “job consciousness” as the touchstone of spontaneous labor organization practice and policy [e.g., 9, 12, 14 (Kassalow), 18, 22, 23, 24, 25, 27, 29, 32, 33, 35]. But the *early meaning*, if not the *analytical validity* of “job conscious” unionism, was beyond question.

The definitional waters were stirred up and muddied in a post-New Deal and post-World War II procession of reviews and reconsiderations of the analytical role of “job conscious” unionism. Perlman

and others embarked upon a revisit to American unionism in the post-war world and in the process sought to “organically reinterpret” and “dynamize” the concept of “job consciousness” [e.g., 8, 10, 11, 13, 14 (Bauder and Kaiser), 15, 16, 19]. The result was clear: the *meaning* of “job conscious” unionism became so elastic as to diminish seriously any possibility of considering the *meaningfulness* of the concept in the face of such reinterpretation.

The vector field of “job conscious” unionism, 1928 version. I said that the concept of the “job conscious” union was clearly specified by Perlman in his 1928 classic. Yet there is nowhere at any single place in the volume a complete definition of the term. What we have instead is a concept that takes on its full meaning only after the book is completed. Perlman’s definition of the “job conscious” union emerges only, as it were, as an overlay series. The most effective way of viewing and defining the “job conscious” union as Perlman defines it here is to describe it as a vector field. The “job conscious” union constitutes a behavioral region containing a cluster of points each of which is characterized by a definite position along some relevant vector of worker attitude or activity. The “job conscious” union is described and shaped by this field of conjunctural quantities or qualities of a set of relevant attributes of labor organization behavior.

The accompanying chart enumerates those attitudinal and behavioral vectors which I feel Perlman implicitly or explicitly suggests as impinging upon the practices and objectives of labor organizations. They constitute the set of variables describing a labor movement’s practice and policy. For each I have marked off an illustrative set of values at a point or within a range along the vector. The “job conscious” union as we shall note in a moment is the resultant of one specific and related set of vectoral values which create the union’s field of force. This set of magnitudes and directional guideposts shapes and constrains the life lines and the pathways of the “job conscious” union.

What are these vectors (or variables) and which combination of vector values describes Perlman’s “job conscious” union, 1928 version?

There is first the time horizon of worker concerns and demands which may vary from the “moment” to the “millennium.” Second, a solidarity or identification vector includes worker self-identification limits which run the gamut from very limited solidarity boundaries (like the group of employed unionized members of a distinct craft) to the all-encompassing solidarism of “mankind.” Third, a security-change

CHART I

Worker Attitude and Activity Vectors Affecting the Nature and Functions of Labor Organization

1. The time horizon of worker concerns and demands

<p>Short-term span about "now"</p> <p>yesterday tomorrow</p> <p>"more now" "consumptionist" unionism</p>	<p>Medium-term horizon</p> <p>several year range</p> <p>"short-term sacrifices in the public interest" spurred, e.g., by appeals re price inflation, balance of payments</p>	<p>Multi-generational horizon</p> <p>generational comparisons of welfare levels</p> <p>"generational sacrifices for growth and development" "production-oriented" unionism</p>	<p>Millennial and utopian horizons</p> <p>the summum bonum</p> <p>concerns for the maximizing of future welfare for all mankind</p>
---	--	--	---

2. The limits of identification or solidarity vector

<p>Craft and co-members of labor organization</p> <p>including employed unemployed</p> <p>limited solidarity boundaries of the craft union</p>	<p>Craft</p>	<p>Industry</p>	<p>The class of workers in the region or the society</p>	<p>The Nation</p>	<p>Workers of the world</p>	<p>Mankind</p> <p>all-embracing solidarism of mankind</p>
---	--------------	-----------------	--	-------------------	---------------------------------	---

CHART I (Continued)

3. *The "security-stability"—change continuum*

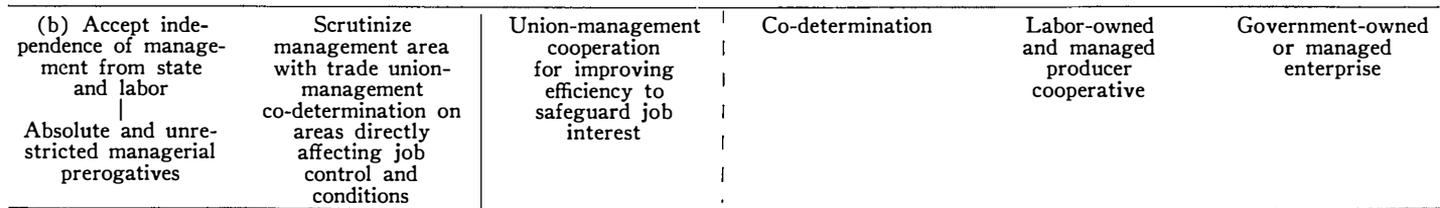
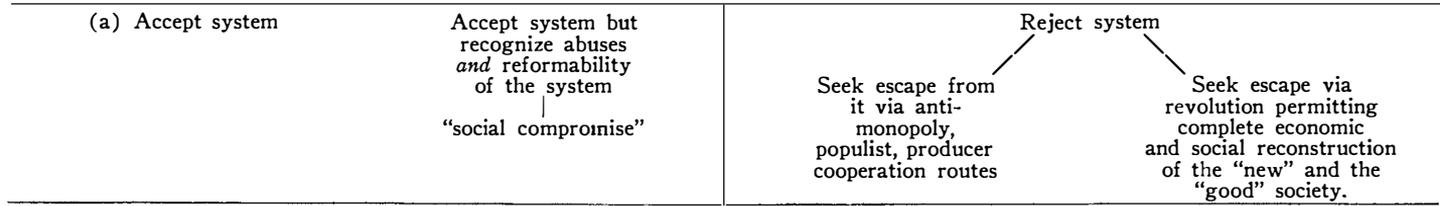
<p>Safeguard and control job territory | guarantee jurisdiction; parcel out equitably among members; resist all incursions from any source and all change which threatens <i>the job</i></p> <p>Security and stability the keynote</p>	<p>Accept change but only if no job displacement results.</p> <p>Resist change which leads to displacement</p>	<p>Accept change but seek accompanying guarantees of alternate employment opportunities for those seeking to work plus cushioning of transitional displacement problems or seek guaranteed incomes</p>	<p>Encourage change and eschew stability | Trade union, management and government together concentrate on education and upgrading of individual worker's personal assets inventory to permit flexibility and application of maximum and shifting capacities in a world of work with continuing change.</p> <p>Non-threatening change the keynote of working life rhythm.</p>
--	--	--	--

4. *The substantive focus of worker demands: the relevant scope of worker interests*

<p>Wages, hours and terms and conditions of employment on my job</p>	<p>The health of the enterprise</p>	<p>The industry's health</p>	<p>Relative shares and wage gains for all workers</p>	<p>The national welfare | Concerns with levels and rates of growth of GNP; Medicare; housing, education, area redevelopment; general poverty elimination programs, tax programs, trade expansion programs, etc.</p>	<p>The public (international) weal | UN concerns; international trade and aid programs, development of "poor" countries, etc.</p>
--	-------------------------------------	------------------------------	---	---	---

Chart I (Continued)

5. *The array of acquiescence—rejection postures involving* (a) the general political and economic organization of society; (b) private management of enterprise *independent of government and labor*



6. *The arena for worker-manager-state interaction*

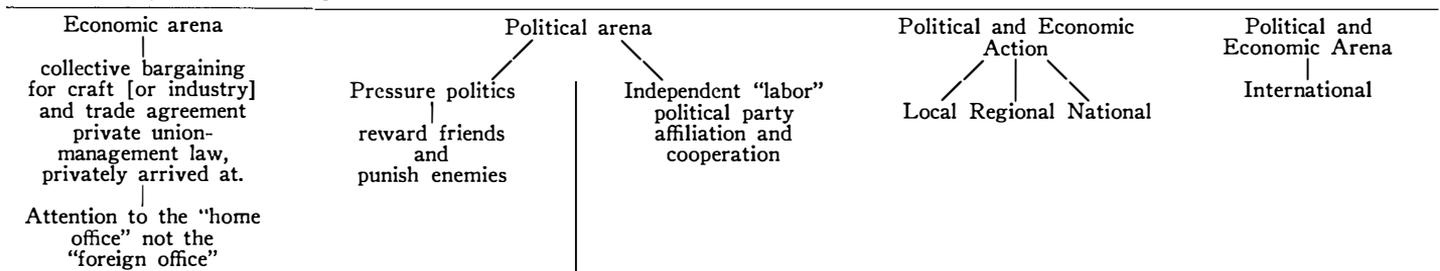


Chart I (Concluded)

7. *The self-reliance-dependency scale: (a) re government; (b) other "outsiders"*

(a) Individual worker	<p>"Voluntarist" grouping of the craft for self-help via mutual aid, collective bargaining.</p> <p>(Voluntarist because minority-conscious)</p>	<p>Reliance on government to aid the inherently "weak" worker groups—women and children</p> <p>↓</p> <p>very limited dependence on government</p>	<p>Reliance on government for regulation re "procedures"</p> <p>↙ ↘</p> <p>Enabling legislation</p> <p>↓</p> <p>elimination of judiciary or legislative or executive impediments to effective <i>private</i> action</p> <p>Prescription of <i>positive</i> procedural legislation and regulation</p>	<p>Reliance on government for <i>substantive</i> gains in terms and conditions of work or for substantive improvements in pre and post employment lives</p>
(b) Suspicion of the outsider (the "intellectual" misleader of worker organization)	<p>Acceptance of outsider as staff aid to worker organization</p>		<p>Dependence on outsider guidance and help</p>	

8. *The degree of formal structuring and delineation of ideological appeals*

<p>Blind-groping Vaguely grasped power Tom, Dick and Harry-ism</p>		<p>Self-conscious cement of full-bloom ideology.</p> <p>Elaborated "isms"</p>
--	--	---

continuum permits variations from an emphasis on complete stability to continuing change as the accepted keynote of working life rhythm. Fourth, the scope of worker substantive interests may range from the terms and conditions of his job to a concern with the public weal the globe over. Fifth, worker postures concerning the general political and economic organization of society may range from complete acquiescence to complete rejection. Similarly, worker views concerning the independence of managerial prerogatives may range from complete acceptance of absolute and unrestricted private managerial rights to full comfort in a government owned or managed enterprise. Sixth, the arena seen as appropriate for the interaction of workers, managers, and state will range from close "attention to the home office" in the economic arena of limited-scope bargaining with a private employer through a variety of political and combinations of political and economic action arenas. Seventh, the self-reliance—dependency scale runs the gamut from self help as an individual or limited boundary group to reliance on government as the fount of all substantive gains and improvements in the outside working life. A related index of self-reliance extends from suspicion of all outsiders as "intellectual" misleaders of worker organization to a total dependence on and acceptance of such outsider guidance. Finally, the degree of structural ideological cant may run from "blind groping for power" to the "self conscious movement with a full-blown ideology."

Perlman's "job conscious" unionism, *premier cru* 1928 (and incorporating the minor clarifications provided in the slightly later Perlman and Taft *History* [7]) was simply the cover label he put on the resultant of a conjuncture of values which lay at or near the most limited end of each of these vector ranges of possibilities. "Job conscious" unionism is Perlman's semantic umbrella for a unionism geared to the here-and-now, self-interested search for group security in a job niche or territory specified by limited horizons of occupational solidarity and entailing only limited reformist objectives. These objectives are sought and easily incorporated in a generally acceptable broader managerial and social, political and economic context. These objectives, further, are bargained for in a narrow workplace arena in self-reliant fashion, the workers remaining independent of government or other outsider help and reacting in a fashion as free of ideological directives as is possible to manage without succumbing to sheer Brownian movement.

The “action” in Perlman is, in short, almost entirely defined by values at the left-hand side of these vectors and the resultant field of force is constrained by this conjuncture of decisive bounds and limits for the worker organization’s actions and programs. These bounds are clearly discerned in Perlman’s *Theory* and it is easy to mark the vector bounds which he posits. (I have done so on Chart I. The solid lines mark off clear generic limits of the “job conscious” union; the occasional dashed line represents a Perlman concession to some foreseeable and digestible mutation of the “job conscious” union and are indeed the outer limits of the concept.)

The subsequent extension and elasticizing of the concept. This early and fairly straightforward delineation of the “job conscious” union remained undisturbed for almost a decade and a half. This interval included, moreover, the deepest economic depression the United States had yet experienced, economic recovery, a world war, and a substantially enhanced role for government in the society. It embraced as well a marked evolution in the numbers, composition and structure of unionized workers in American industry. It would not have been surprising in the aftermath of such change to see “reconsideration” given to the analytical validity and contemporaneous descriptive applicability of a concept nurtured and born in pre-1928 experience. The anticipated reviews and re-evaluations of the applicability of “job conscious” unionism did indeed appear and their conclusions are noted below. Some of these commentaries sought to stretch the 1928 meaning of “job conscious” unionism to permit incorporation of the many intervening changes in the labor movement and in the society. Others denied that anything had indeed really changed and saw the same old “job conscious” unions flourishing now as before.

There were very early efforts in 1942 to give full endorsement to independent political action as consistent with “natural job conscious” labor strategy. Political action was no longer seen as a “blind alley” but as the “paramount” weapon of the trade union. But Perlman himself very quickly reasserted in 1945 that pressure politics rather than independent labor parties were the true hallmark of the “job conscious” union’s ventures into the political arena. He continues to argue in 1945 that nothing that had happened had really changed the fact that “job consciousness” remains as the “nuclear interest” of labor organization. Philip Taft in three out of four times at bat went even farther than Perlman himself in this dynamizing process [10, 11, 19]. Taft asserted

and reasserted that trade unions (rather than political parties) are "labor's institution *par excellent*" and that "*whatever the trimmings,*" the union's concentration remains upon job interest as "almost but not quite its sole activity." Political activity? Concerned primarily with "the effect of legislation upon . . . ability to control the job." Other activities? "The aim [of the mass production CIO unions] is generally the same [as that of the artisan trade unions] . . ." Indeed "all unions are business unions . . . their other characteristics are likely to be accidental in the sense that they are not essential for the carrying out of the union's main functions." [19, p. 25] The extended "job conscious" union concept was thus converted to a global catch-all and given renewed and virtually eternal applicability.

David Kaplan, Russell Bauder and Philip Kaiser joined Perlman and Taft in this elasticizing of the "job consciousness" concept [13 and 14, pp. 169-176]. We are confronted with the conclusion that "'job consciousness' trade unionism is not a narrow, sectarian and selfish phenomenon. It is, rather, as Professor Perlman has *always* [my emphasis] suggested, the nuclear content of labor's interest (so well described by Mr. Kaplan today), a content, which I have found actually drives labor to expand, rather than narrow its horizons. . . . [It is] the nuclear concern of 'job conscious labor' [which] supplies relevance and concrete meaning to the other issues. . . ." [14, p. 176]

The fact, of course, is that Perlman had not *always* so described his concept and there were a few dissenting voices like those of Everett Kassalow [14, pp. 177-183] and Max Kampelman [21] who recognized that it was the 1928 definition of the "job conscious" union which was stretching to keep pace with the many changes that had occurred, thereby affording the illusion of "no change." Kassalow puts it straight out; Kampelman's is a rather roundabout way of putting it: "The changes that have taken place in labor's attitude toward political parties and political action are changes which have grown out of a developing definition of what a 'job conscious' movement must do to meet the needs of its membership. The interests of the labor movement of necessity no longer remain narrow but rather encompass most public issues." [p. 190]

* * * * *

What happened to the concept in these few years of the late forties and early fifties is really quite clear. The "action" on the American scene had shifted from the most limiting points on Perlman's relevant

behavior vectors to a modal field of force now definable by points lying further along toward the right on these vectors. Instead of acknowledging this shifted action field and the lessened descriptive applicability of his “job conscious” union, Perlman and some of his disciples sought instead to extend the earlier definition of the “job conscious” union to permit it to incorporate this new modal labor organization behavior. They proceeded to confirm this applicability by asserting frequently that the action field had indeed not shifted *entirely* to the other extreme range of the vector field and by underlining those behavioral aspects of the prevailing unionism which overlapped the practices of the “job conscious” union. But denying that trade unions were now pressing for revolutionary ends or reconfirming that trade unions still negotiated trade agreements and had interests in job conditions is no invalidation of the only relevant fact—that trade unions were indeed behaving substantially differently *in many respects* (and hence modally) from the 1928 vintage “job conscious” union.

THE CONTEMPORARY RELEVANCE OF “JOB CONSCIOUS” UNIONISM

The preceding discussion of the shifting meaning of “job conscious” unionism is an essential antecedent to any consideration of the concept’s relevance for us now. On this matter of contemporary relevance I make two initial points, one on method, the other substantive.

1. Giving infinite elasticity of meaning to a concept hides change from our perception and damps down the stirrings within us to understand the changes. The initial meaning of “job conscious” unionism distilled from the 1928 *Theory* outlined above is the one I have chosen to test for present relevance. This is not a matter of setting up a “straw man” but a simple prerequisite for setting up the basis for *any* discussion of the concept’s relevance.

2. How useful is that 1928 version of the “job consciousness” concept for us now? My overall assessment is that its *explanatory* relevance has from the start been of limited worth in the global context at which it was aimed and that this initially limited explanatory relevance has steadily diminished in the face of the social, economic and political changes of the past third of a century elapsed since the concept’s inception. On the other hand, “job conscious” unionism enjoyed somewhat greater applicability as a *descriptive labeling shorthand* for what was for a time the modal behavior and attitude “action field” of labor organization in the United States. Even here, since the

mid-thirties this more limited applicability has steadily dwindled as the modal labor organization field of force has been restructured by the changing magnitudes and directional tilts of the variables shaping worker organization behavior.

It is clearly impossible in a short paper to document in detail the full range of fact and argument entering into this overall assessment. Nor is it necessary for there is a large literature touching on many of these matters. All I can do here is to cite those sources which have persuaded me on the issue of *analytical relevance* and to offer a few illustrative points bearing on my conclusion concerning the diminished *descriptive applicability* of the concept even in its most favorable ball park, the United States.

The explanatory usefulness of "job conscious" unionism. Perlman's view of the "job conscious" union as the resultant typical and natural form of labor organization for workers in capitalist industrial society involved a basic element of explanation. This was in addition to his seeing the concept as a key descriptive device. And this is so because the underlying source of the "job conscious" union lay in Perlman's ascription to workers of a universal scarcity and minority consciousness. This "mentality," confronting strong-willed capitalists and eschewing intellectual miscreants led invariably to the modal pattern of the defensive and limited range and style "job conscious" union.

A number of writers have dealt with this explanatory relevance of "job consciousness." I find myself in accord with the earlier assessments by Hardman [12], Sturmthal [18, 23], Gulick and Bers [9, 22] and others [25, 27, 33] that the explanatory value of this concept has severe inherent limitation from the start. The position of these writers is essentially this: "Job conscious" unionism was for a time a good *descriptive* cover for trade union behavior and policy in the United States; it was a reasonably good "fit" for the American trade unionism of the 1890-1930 period. But even here the *explanation* for this good descriptive fit had to proceed beyond the conjuncture of scarcity consciousness (implicit in the concept of "job consciousness"), strong capitalists and rebuffed intellectuals. Perlman's *obiter dicta* in his *Theory* were the better explanation for his *History* than were his trilogy of theoretical components of which manualist scarcity or "job consciousness" was one strategic element. To understand "job conscious" unionism one had to go beyond its psychological mainstay to the additional consideration of the specific technical, economic, cultural and

political heritage and environments of the workers and their organizational devices. This Perlman did but only as an *aside* in his theory.

Moreover the "job conscious" union resultant postulated by Perlman turned out not to be even a good descriptive cover label for modal worker organization and behavior in other parts of the world. The "pure and simple" union model was simply not appropriate in many parts of the world. Whatever limited explanatory usefulness the concept contained by dint of its effective description of an important variant of labor organization in the 1890-1930 United States is therefore sapped in a world-wide analytical context.

The descriptive usefulness of "job conscious" unionism: some general comments. The case for the limited descriptive applicability of the "job conscious" union concept is equally clearly made in the literature. Hardman, Sturmthal, Gulick, Kassalow among others have convincingly supported the descriptive "fit" of other than "job conscious" unionism to the realities of the Western European labor scene. For the universe of the newly developing economies in Africa, Asia and Latin America we can similarly conclude that the "job conscious" union is not an adequate descriptive cover label for "what is." For the evidence, read only Walter Galenson's edited volumes of studies dealing with labor and labor issues in developing countries; a sampling of the many recent additions to detailed country or regional studies of the role of labor organization in the process of economic growth; Kassalow's edited book on national labor movements in the postwar world [33]; Millen's detailed probing of the political role of labor in developing countries [32]; Sufrin's monograph on unions in emerging societies [35]; and the admirable recent effort at synthesizing major trends in industrial relations and economic development undertaken by an ILO research team.¹ There can, in short, be little doubt today that the "job conscious" union is not the typical global variant of labor organization and this being the case, its current relevance even as a satisfactory *descriptive* device is meager. Because it does not even apply as well where it once did in the United States, its *overall* contemporary descriptive value can be said to have diminished in recent decades.

The diminished descriptive applicability of "job conscious" unionism in the United States today. As we look at recent domestic drifts, the

¹ The team worked from a global and multi-lingual literature in preparing this "trends" report as preparatory backdrop for a recently convened international research conference on industrial relations and economic development [40].

action field for labor organization has clearly shifted still further from the movement Perlman had perceptively noted but sought to encompass in his restatements in the 1940's and early 1950's.

1. The concept of a job territory, of a jurisdiction to be guarded against intruders and to be parceled out equitably among the territorial occupants has been substantially weakened over the decades as the heart of worker concern with job security. The emphasis has shifted steadily from security gained by guarding an unchanging parcel of job territory to that of security derived from the guaranteed employment opportunity and minimal income guarantee. The drift has been from focusing on property rights in *the* job to guaranteed rights to *a* job, from holding *the* job to getting and keeping *a* job.²

This is an essential difference. It permits and involves a much broader range of behavior options along our security-change vector. Restriction of numbers and work-spreading devices are still possible recourses against economic or technical change. But we have seen the proliferation of many others: adequate advance notice of displacement; attrition, early retirement, retraining, transfer, and relocation allowances developed as methods of avoiding layoffs; severance pay, supplemental unemployment benefits and vesting of pension rights as methods of easing the burden of unemployment; development and improvement of placement and referral services, training for jobs outside the plant, union-sponsored and other training programs, apprenticeship and anti-discrimination policies as methods of facilitating new employment. There are in short new, many and varied methods of adjusting to and accommodating change [36].

Nor are there any intrinsic limits to bind a new or a renewed leadership from pushing toward Neil Chamberlain's goal where the ultimate concern is with the individual worker's personal assets inventory, with its development, upgrading, and ongoing maintenance—all with an eye toward the flowering and sustenance of maximum capacities and with the encouragement and facilitation of their application in flexible

² There are still, of course, some jurisdictional disputes, manning rules, work-spreading devices, but the truly hard-core traditionalist view of security via securing a job territory remains today only in those instances where change threatens to eliminate an entire traditional craft and hence the institution representing it. The stiffest resistance to change thus comes from the institution's leaders who are resisting more the demise of an organization than the death of a craft. The recent traditionalist postures of the typesetters, the railroad firemen-helpers or of the airline's flight engineers are examples of such extreme positions.

fashion in a world of work marked by the rhythms of the change and flux of growth and meaningful activity [39].

2. This shift in the security-change continuum, moreover, permits in turn a much greater flexibility and range of options along a number of our other behavior and attitude vectors. It reflects as well, for example, a major shift along the self-reliance vector from the earlier voluntarist limited group self-help of the Gompers style union to a greater recognition and acceptance of the broadened role of government in the society. The Gompers era “job conscious” union barely tolerated the very limited government efforts to regulate a few minimal work standards for the inherently weaker groups of the labor force such as women or children. The modal American union today appreciates the interdependence of worker organization and government action.

3. There is a steadily expanding scope of substantive worker interests reflected in recent trade union activity. Pressures from many sources have played upon the unions to extend their substantive horizons. Consequently unions today are vitally concerned with levels and rates of growth, Medicare, education, housing, area redevelopment, “poverty” programs, tax programs, trade expansion programs, international trade and aid programs, the development of poor countries, aid to labor movements abroad, and so on. These other-directed, public, national and international-conscious interests may still take a back seat in relation to the more self-centered interests in wages, hours and terms and conditions of work. That they exist at all, however, is ample reflection of dramatic shift over time in the scope of worker organizational interests.

4. There is also the related pressure imposed upon the labor scene in recent years which seems to make an occasional dent in shifting labor’s traditional short-term here-and-now job gains time horizon to a somewhat broader span. The stream of appeals from Presidents Eisenhower, Kennedy and Johnson for a greater public-interest consciousness may not yet have struck deep roots or gained wide acceptance from either trade unionists or trade union leaders. These recurrent stresses on longer-term considerations turning on price level or balance of payment or whatever national welfare appeals as these relate to the business of pressing wage gains are bound nonetheless to rub off and leave at least a minimal effect over a longer period of time. The really remarkable (if ultimately ineffective) joint declaration of intent signed last year by employer and trade union leaders in the United Kingdom

may be (whether we approve of such drift or not) the harbinger of comparable things to come at some future date in this country.

5. Finally, this is all bound to affect and has already begun to affect the limits of self-identification. We are still a far cry from a solidarism of all mankind but the recent civil rights and poverty programs have both received private and public support from the labor movement. The tempo or the vigor of this support may be criticized by spokesmen for the affected groups or by the articulate prodders of labor but warranted or not, such carping tends only to distract our view from what is relevant for this point, i.e., that the labor movement of 1965 has come a long way from Mr. Strasser's characterization of his own relations to the men and women outside his cigarmakers local.

* * * * *

In sum: There remains a far distance to travel yet to reach the extremes at the opposite pole of the "job conscious" union's cluster of vector values but a cross-sectional comparison of the vector fields of the 1965 and the 1925 American labor movement will reveal to any viewer a series of remarkable interim changes. And *none* of these reinforces the current validity or meaningfulness of a "job conscious" unionism cover label for the behavioral mix we see now or can project for the near future for the American labor movement.

It would indeed have been surprising to find otherwise. Differences in times and customs, in economic and political realities, were bound to be reflected in the evolution of different variants of labor organization in the United States as well as in different industrial relations systems in different places. It is time therefore that "job conscious" unionism be accepted as a descriptive shorthand for the characteristics of the American labor movement at a particular point in its development and discarded as an explanatory or an exclusive label. Analysis of labor organizational behavior can make easier progress in giving recognition to the legitimacy of varieties of behavior patterns. Understanding can then be gained by seeking out the differences and similarities in antecedent sets of influencing factors associated with such variants of labor organization or industrial relations systems.

There is, finally, the important concern that labor organizational behavior itself may be affected and at times constrained by the mode and units we adopt to measure such behavior. Perlman himself was ready to concede at one time that the AFL may have "missed the boat" on a number of occasions in adapting to changed circumstances. How

ironic if the constraint of the “job conscious” image should even have played a minor part in this shunning of mutation, avoidance of experiment or soft-pedaling of the trial of alternative mixes of behavior and attitude. The danger of the cover *label* or behavior *measure* too long or too ardently held is that it may be too readily conceived as behavioral *guide* as well. In that event, yesterday’s behavioral pragmatism may become today’s parochialism or even tomorrow’s peril.

REFERENCES

- [1] Samuel Gompers, *Labor and the Common Welfare*, New York, E. P. Dutton & Co., 1919.
- [2] Robert F. Hoxie, *Trade Unionism in the United States*, New York, D. Appleton, 1922.
- [3] Solomon Blum, *Labor Economics*, New York, Henry Holt & Co., 1925.
- [4] Selig Perlman, *A Theory of the Labor Movement*, New York, Macmillan, 1928.
- [5] J. B. S. Hardman and associates, *American Labor Dynamics*, New York, Harcourt Brace and Company, 1928.
- [6] V. I. Lenin, *What Is To Be Done?*, New York, International Publishers, 1929.
- [7] Selig Perlman and Philip Taft, *History of Labor in the United States, 1896-1932*, New York, The Macmillan Company, 1935.
- [8] Selig Perlman and William H. Knowles, “American Unionism in the Postwar Period,” in T. C. T. McCormick (ed.), *Problems of the Post-war World*, New York, McGraw-Hill Book Co., 1945.
- [9] Charles A. Gulick, *Austria from Hapsburg to Hitler*, Berkeley, University of California Press, 1948.
- [10] Philip Taft, “A Rereading of Selig Perlman’s A Theory of the Labor Movement,” *Industrial and Labor Relations Review*, October 1950.
- [11] Philip Taft, “Commons-Perlman Theory: A Summary,” *Proceedings*, Industrial Relations Research Association, December 1950.
- [12] J. B. S. Hardman, “From ‘Job-Consciousness’ to Power Accumulation,” *Proceedings*, Industrial Relations Research Association, December 1950.
- [13] David Kaplan, “Job Conscious Unionism as a Form of Economic Citizenship,” *Proceedings*, Industrial Relations Research Association, December 1950.
- [14] Russell S. Bauder, Philip Kaiser, Everett Kassalow, “Discussion” of Theory of the Labor Movement—A Reappraisal, *Proceedings*, Industrial Relations Research Association, December 1950.
- [15] Selig Perlman, “The Basic Philosophy of the American Labor Movement,” *The Annals of the American Academy of Political and Social Science*, March 1951.
- [16] Philip Taft, “Internal Characteristics of American Unionism,” *The Annals of the American Academy of Political and Social Science*, March 1951.
- [17] Avery Leiserson, “Organized Labor as a Pressure Group,” *The Annals of the American Academy of Political and Social Science*, March 1951.
- [18] Adolph Sturmfahl, “Comments on Selig Perlman’s A Theory of the Labor Movement,” *Industrial and Labor Relations Review*, July 1951.
- [19] Philip Taft, “Theories of the Labor Movement,” *Interpreting the Labor Movement*, Industrial Relations Research Association, December 1952.
- [20] Father George G. Higgins, “Union Attitudes Toward Economic and Social Roles of the Modern State,” *Interpreting the Labor Movement*, Industrial Relations Research Association, December 1952.
- [21] Max M. Kampelman, “Labor in Politics,” *Interpreting the Labor Movement*, Industrial Relations Research Association, December 1952.

- [22] Charles A. Gulick and Melvin K. Bers, "Insight and Illusion in Perlman's Theory of the Labor Movement," *Industrial and Labor Relations Review*, July 1953.
- [23] Adolph Sturmhthal, *Unity and Diversity in European Labor: Introduction to Contemporary Labor Movements*, Glencoe, Illinois, Free Press, 1953.
- [24] Clark Kerr and Abraham Siegel, "The Structuring of the Labor Force in Industrial Society: New Questions and New Dimensions," *Industrial and Labor Relations Review*, January 1955.
- [25] *American Labor's Role in Less Developed Countries*, New York State School of Industrial and Labor Relations, Cornell University, 1958.
- [26] Mark Perlman, *Labor Union Theories in America*, Evanston, Illinois, Row, Peterson and Co., 1958.
- [27] Clark Kerr, John T. Dunlop, Frederick Harbison and Charles A. Myers, *Industrialism and Industrial Man*, Cambridge, Massachusetts, Harvard University Press, 1960.
- [28] Adolph Sturmhthal, "Unions and Economic Development," *Economic Development and Cultural Change*, January 1960.
- [29] Maurice E. Neufeld, "The Inevitability of Political Unionism in Underdeveloped Countries: Italy, the Exemplar," *Industrial and Labor Relations Review*, April 1960.
- [30] Industrial Relations Research Association, *The International Labor Scene*, Proceedings, May 1962.
- [31] Michael Rogin, "Voluntarism: The Political Functions of an Anti-political Doctrine," *Industrial and Labor Relations Review*, July 1962.
- [32] Bruce H. Millen, *The Political Role of Labor in Developing Countries*, Washington, D. C., The Brookings Institution, 1963.
- [33] Everett M. Kassalow, ed., *National Labor Movements in the Postwar World*, Northwestern University Press, 1963.
- [34] John P. Windmuller, "Model Industrial Relations Systems," *Proceedings*, Industrial Relations Research Association, December 1963.
- [35] Sidney C. Sufirin, *Unions in Emerging Societies, Frustration and Politics*, Syracuse University Press, 1964.
- [36] U. S. Department of Labor, *Methods of Adjusting to Automation and Technological Change*, 1964.
- [37] Arthur M. Ross, "Labor Organizations and the Labor Movement in Advanced Industrial Countries," *Virginia Law Review*, Vol. 50, No. 8, 1964.
- [38] Elliot J. Berg, "Socialism and Economic Development in Tropical Africa," *Quarterly Journal of Economics*, November 1964.
- [39] Neil Chamberlain, "Unions and the Managerial Process," unpublished ms., 1964.
- [40] International Institute for Labour Studies, ILO, *Labour Relations and Economic Development*, Trends in Research and Bibliography prepared for a Research Conference on Industrial Relations and Economic Development, August-September 1964.

THE CONCEPT OF BARGAINING IN INDUSTRIAL RELATIONS

MYRON L. JOSEPH
Carnegie Institute of Technology

The trouble with the concept of bargaining is that it never travels alone. That would not be too bad except that it has gone steady with a long list of others. So, that, instead of bargaining by itself we always find:

- Collective bargaining
- Bargaining power
- Bargaining theory
- Bargaining relationships
- Bargaining behavior
- Formal and informal bargaining
- The duty to bargain
- Bargaining institutions
- Bargaining subjects.

and probably many others. Bargaining is a Blue Beard of a concept.

It would not be far from the truth to say that bargaining is simply another way to define the field of industrial relations. But that would not be very helpful. Instead, I will try to distinguish among some of the major interpretations of the concept and explore their implications.

One extreme is characterized by Professor Tripp's "Development of the Concept of Collective Bargaining Theory."¹ His frame of reference was the relationship between socio-economic groups in the society, and he undertook "to identify the functional roles of employer (corporate or otherwise) and employee organizations in an operating social-political economy." This approach follows in the path of Commons and Perlman and their analyses of the impact of the environment and historical background on the development and behavior of labor organizations.

Although it might be appropriate to use the term *bargaining* to describe the relationship between labor and other groups in a society, the use of *collective bargaining* in this context is misleading. Professor

¹ A. Reed Tripp, "Collective Bargaining Theory in *Labor, Management and Social Policy*," edited by Gerald Somers, The University of Wisconsin Press, Madison, 1963.

Tripp says that by a theory he means "a system of thought intended to help explain and predict human behavior," but his concept of collective bargaining contains strong value elements. For example, he states that "collective bargaining theory merely asserts that the parties to the bargain can establish realistic and acceptable wages and employment terms more reliably than can labor courts or other alternative devices for setting wages and work rules." His claim may be correct, but it does not follow from the type of theory he presents. We should not confound attempts to explain the development of our bargaining institutions with a listing of the virtues of collective bargaining from the point of view of society and employees.

A conceptual framework tends to structure the analysis of a problem area. If we are concerned with the development of theories that will help us understand the interaction of socio-economic groups in different environments, including the changing nature and role of labor organizations in our own society, the concept of "collective bargaining theory" is too restrictive and implies a conclusion or a set of values that are inconsistent with the proper role of a theory.

To avoid confusion and to encourage the objective analysis of the many possible patterns of institutional development, we should encourage labor movement theory and analysis and confine the concept of collective bargaining to the particular institutional framework to which it is relevant.

Moving further along the concept continuum, we find collective bargaining used to describe the total pattern of relationships between organized labor and management within our institutional framework. In 1958 Professor Joseph Shister asserted that "a meaningful characterization of the nature of collective bargaining is an absolute necessity for gaining a systematic perspective of both the process as a whole and its component parts."² He went on to complain that "the explicit and systematic characterization of the process is conspicuous by its relative scarcity." One attempt was made by Neil Chamberlain in 1951 when he described a three-fold conceptualization of collective bargaining.³ He suggested that it might be looked upon as an exchange relationship, as a means of contracting for the sale of labor; as a constitutional

² Joseph Shister, "Collective Bargaining" in *A Decade of Industrial Relations Research*, edited by Neil Chamberlain, Frank Pierson and Theresa Wolfson, New York: Harper and Bros., 1958.

³ N. W. Chamberlain, *Collective Bargaining*, New York: McGraw-Hill, 1951, Ch. 6.

system in industry with the union sharing sovereignty with management over the workers; and as a method of business management, with the union joining management in reaching decisions on matters in which both have interests. All of these are, of course, partial abstractions but each provides a framework for the analysis of important aspects of collective bargaining.

Shister questioned the "operational relevance of the differentiation" but it is precisely at the operational level that Chamberlain's emphasis on partial abstractions is useful in the implementation of collective bargaining theory as that concept is interpreted by Shister. The entire matrix of collective bargaining relationships is too broad and too complex to be amenable to fruitful analysis. The theoretical constructs proposed by Chamberlain suggest the kinds of variables and relationships that might be developed into testable propositions. As an alternative Shister suggests a simplified characterization of collective bargaining somewhat along the following lines:

1. Collective bargaining involves group relationships . . .
2. Collective bargaining involves a continuous relationship.
3. Collective bargaining is evolutionary (dynamic) . . .
4. Collective bargaining is diversified . . .
5. While the collective bargaining relationship is dominantly a private one (in America) it is influenced by government policy and action.
6. Collective bargaining—viewed as a national institution—is conditioned by and in turn conditions, the relevant components of the socio-economic climate."

I would agree that Shister isolated several basic characteristics of collective bargaining, but a set of characteristics does not provide a framework for analysis. Indeed, the characteristics that he lists could easily be applied to other institutions or behaviors. There is nothing in his list that gives any clue to what collective bargaining is or how it might be analyzed. He avoids the problem of conceptualization. Shister raises the question "is it feasible to elaborate a general model or framework in terms of which collective bargaining can be more constructively understood with regard to determinants? . . . The stand taken here is that we can." I would respectfully disagree. If by collective bargaining we mean the entire set of relationships or the entire pattern of interactions between labor and management, I would argue that the term describes a useful and important field for study but is not,

in itself, a fruitful analytical concept. It is true that there is a high degree of interdependence among the various aspects of the complex collective bargaining matrix. But in our modern world, and certainly in our economy, the level of interdependence is high. It does not follow that the appropriate level of analysis is the entire system.

Moving further along the continuum we find the collective bargaining concept perceived as a union-management decision process with the primary focus on the inter-organizational relations. This interpretation of the collective bargaining concept is the basis for attempts to define scales on which different collective bargaining relationships can be located, and for the development of hypotheses concerning the effects of various environmental and behavioral variables on the character of the bargaining relationship.⁴

The decision-process concept has also been the basis for the many studies of the impact of collective bargaining on relative wages,⁵ the most advanced example of which is Professor Lewis' analysis of unionism and relative wages.⁶ It is also the conceptual base for studies of the different patterns of wages and working conditions that are generated by the bargaining decision process.⁷ Our attempts here have tended to be either highly theoretical and general on the one hand or at the level of fairly detailed case study descriptions at the other extreme. I understand from Professor Harold Levinson that he has a project underway that has as an objective the development of an empirical basis for evaluating the importance of economic, political and other power variables in explaining the relative movements of wage and fringe benefits in several different collective bargaining situations. The concept of an inter-organizational decision process functioning under pressures from the socio-economic environment should point the way toward testable hypotheses in this area. I would place high on the

⁴ Robert Dubin, "Power and Union-Management Relations," *Administrative Science Quarterly*, June 1957; Clinton S. Golden and Virginia D. Parker, *Causes of Industrial Peace Under Collective Bargaining*, New York, 1955; Frederick H. Harbison and John R. Coleman, *Goals and Strategy in Collective Bargaining*, New York, Harper and Bros., 1951.

⁵ For a good review of the studies see Albert Rees, *The Economics of Trade Unions*, Chicago, The University of Chicago Press, 1962, pp. 75-99.

⁶ H. Gregg Lewis, *Unionism and Relative Wages in the United States*, Chicago, The University of Chicago Press, 1963.

⁷ See for example Sumner Slichter, James J. Healy, E. Robert Livernash, *The Impact of Collective Bargaining in Management*, Washington, D.C., The Brookings Institution, 1960.

agenda the question of how the government's wage-price guideposts and other forms of participation or attempted influence on labor-management relations affected the process and results of collective bargaining.

I have not attempted to summarize the literature, but it is apparent that the concept of *bargaining* interpreted as an inter-organizational decision process has helped to provide a focus for significant research in several directions. Research findings based on this concept help us understand and evaluate collective bargaining, and aid in the formulation of private and public policies that affect the role of bargaining in our economy.

And finally, at the end of the continuum we find the concept of bargaining as an interaction process. William Simkin recently described the collective bargaining process as "the mechanism for equating power on a case-by-case basis and under circumstances prevailing at the time of the particular bargain."⁸ Walton and McKersie⁹ view bargaining as an example of social negotiations, by which they mean "a deliberate interaction of two or more complex social units which are attempting to define or redefine the terms of their interdependence." One of the more interesting aspects of collective bargaining is that it takes place within an interdependence relationship which exists because of the mutual gains to the parties of continuing it, and because it is the best alternative for both parties within a reasonably wide range.

Walton and McKersie correctly label one aspect of their analysis "Market Rigidities," since in a real sense bargaining would not be meaningful in a completely competitive world. Bargaining can be said to occur any time a transaction takes place between two or more parties. This is true in the sense that when two parties try to complete a transaction they are exploring for a solution which both parties would accept rather than lose the transaction. The closer to a competitive situation in which the parties find themselves, the more attractive the next best alternatives will be and the greater the information available to both parties concerning the characteristics of their next best alternatives. At the extreme, under competitive conditions the parties understand that they must either complete a transaction at the conditions enforced by the market or forego the transaction completely. The greater the market imperfection, the less perfect will be the substitutes

⁸ William Simkin, "Mediation Conciliation, and Collective Bargaining," *Michigan Business Review*, March, 1965.

⁹ Robert E. Walton and Robert B. McKersie, *A Behavioral Theory of Labor Negotiations*, New York, McGraw-Hill Inc., 1965.

for a successful transaction, and/or the less perfect will be the parties' knowledge about each other's alternatives. What we normally think of as bargaining involves two parties who at least at the outset have some reason to believe that a successful transaction is possible at terms that are better than the probable outcome of the next best alternatives.

Collective bargaining is complicated by the fact that the interdependency relationship is a continuing one. So that, within fairly wide limits the alternative to a successful bargain is the best of non-agreement rather than the movement to a transaction with some other party. At the extremes, as Walton and McKersie point out, this assumption of continued interdependence can break down and either party can take action to move to an alternate state of interdependence. In most other cases of bargaining, the failure to achieve a satisfactory transaction terminates the interdependency relationship at least temporarily. But in labor negotiations the employer and union continue their bargaining relationship even if negotiations result in a strike, and for the most part the employee-employer relationship is not broken. Only when the parties are pushed beyond the outer limits does the state of interdependency break down completely.

The process of attempting to reach an agreement when at least some of the interests of the bargaining parties are in conflict has been described in a number of languages and formalized in many different equations. Alan Cartter¹⁰ used economic analysis to study the preference patterns of unions and employers in wage bargaining and demonstrated the possibility of shared gains under specified conditions. A first step toward formalizing the process of determining the shares of these gains was made by Hicks in 1932¹¹ when he described the bargaining process in terms of employer and union concession curves. Since then several writers have developed substantially more sophisticated formal models of bargaining. Pen¹² described a model in terms of satisfaction functions, the risk of conflict, estimates of the opponent's will to resist, and the value (positive or negative) of risk taking. Stevens¹³ formulated a conflict-choice model based on a theory of

¹⁰ Allen M. Cartter, *Theory of Wages and Employment*, Homewood, Illinois, Richard D. Irvin, Inc., Chapter 8, "Union-Employer Preferences in Collective Bargaining."

¹¹ J. R. Hicks, *The Theory of Wages*, New York, The Macmillan Co., 1932.

¹² J. Pen, "A General Theory of Bargaining," *American Economic Review*, March, 1952.

¹³ Carl M. Stevens, *Strategy and Collective Bargaining Negotiation*, New York, McGraw-Hill Book Company, 1963.

individual behavior. Mabry¹⁴ stated his formulation in terms of pain and pleasure, Walton and McKersie¹⁵ used the concept of subjective expected utility," and Kuhn¹⁶ describes a bargaining power model in terms of relative evaluations of the bargaining terms.

Although the models differ in detail they are based on a relatively homogeneous view of bargaining. Even Stevens' psychological model can be translated into a reasonable approximation of one or more of the others. Of course none of the models has any empirical content, but they provide a basis for focusing on critical variables, and for estimating the implications of different behavior patterns for the outcome and successful conclusion of bargaining. For example, Kuhn notes that bargaining tactics "consist primarily of seeking to learn the true position of the opponent's power limits and then represent one's own limits as being close to or identical with those limits . . . Strategic maneuvers, on the other hand, consist of actions which change the position of the power limits, either one's own or his opponents."

On the basis of his conflict-choice model, Stevens notes that we may

"view the negotiator during the early stages as primarily concerned with the competitive tactical problem of moving his opponent's equilibrium position (the least favorable terms that the opponent is willing to agree to) as much as possible in his own behalf . . . At some point, . . . competitive attempts to influence the opponent will probably give way to the problem of 'revealing' one's own equilibrium position. . . ." ¹⁷

It appears that the conceptualization of bargaining in relatively formal models has not been sterile, but has been effectively applied to the analysis of bargaining behavior. It might be argued that we have not progressed very far since Hicks in spite of the mathematical formulations and the addition of new variables. It appears at times as if we have only learned to say the obvious in ways that fewer people can understand. But the models do provide a basis for probing further into the bargaining process.

¹⁴ B. D. Mabry, "The Pure Theory of Bargaining," *Industrial and Labor Relations Review*, July, 1965.

¹⁵ Walton and McKersie, *op. cit.*

¹⁶ A. Kuhn, "Bargaining Power in Transactions: A Basic Model of Interpersonal Relationships," *American Journal of Economics and Sociology*, January, 1964.

¹⁷ Stevens, *op. cit.*, page 12.

Walton and McKersie use their subjective expected utility model to analyze bargaining behavior in a game-theory framework, and their model provides a context for the application of experimental findings to the analysis of bargaining. For example, they note the dependence of probability estimates on personality variables, commitment tactics, and the existence of "prominent" solutions. Stevens' model, as indicated above, was the basis for the formulation of testable propositions concerning behavior at different stages of the bargaining process. The formal models provide a context for the integration of what we know about bargaining behavior, and highlight the areas of worthwhile research.

The concept of bargaining as an interaction process has also been the basis for experimental and field studies. The former are severe abstractions, and there is no simple way to test experimental results in the field,¹⁸ but they provide some evidence about the bargaining process and the effects of critical variables on the outcome. For example, Siegel and Fouraker¹⁹ found that there was some tendency for bargainers to negotiate contracts at the pareto optimal, and in experiments conducted with Richard Willis²⁰ I found that the existence of prominent solutions increased the probability of agreement. Experimental studies have built up a body of evidence concerning the role of information and communication in bargaining behavior, as well as the implications of different bargaining strategies.

The possibility of analytical field studies was demonstrated by Ann Douglas' pioneering effort.²¹ She reported that mediators know that "whatever the balance of economic power with which parties come into the conference room, the exercise of negotiating skill at the *table* will in time bring forth its own brand of table-power." Consequently her primary focus was on the behavior of the parties to the negotiations. One aspect of her study is of particular interest in the context of this discussion. Although the conceptualization of bargaining that is the basis for her work is the interaction process, she made explicit the fact

¹⁸ M. L. Joseph, "An Experimental Approach to the Study of Collective Bargaining," *Proceedings of the Thirteenth Annual Meeting of the Industrial Relations Research Association*, 1961.

¹⁹ S. Siegel and L. E. Fouraker, *Bargaining and Group Decision Making*, New York, McGraw-Hill, 1960.

²⁰ M. Joseph and R. H. Willis, "An Experimental Analog to Two-Party Bargaining," *Behavioral Science*, 1963.

²¹ Ann Douglas, *Industrial Peacemaking*, New York, Columbia University Press, 1962.

that bargaining was not simply another example of small group behavior. She criticized the orthodoxy of psychologists for overlooking "the considerable evidence that there is a tenable distinction to be made between the inter-personal and the inter-party climates in negotiation." She was able to distinguish phases of the bargaining process when the parties came close to role-taking, and other periods when the formal roles were of little importance. Bargaining involves both inter-organizational and inter-personal interactions. Field studies of this type are difficult and expensive, and the evidence generated through informal contacts with the parties must be interpreted with caution. However, the value of the other approaches to the study of bargaining behavior and the bargaining process will depend in large part on our ability to test hypotheses directly or indirectly in the real world context. Empirical studies of bargaining, the development of theoretical models, and the extensive experimental work are all evidence of the continuing value of the bargaining concept, viewed as an inter-personal, inter-party interaction process.

There is, of course, a danger that analyses based primarily on studies of the bargaining process will not give proper weight to environmental factors. It is easy to conclude that a wage increase was granted *because* of bargaining simply because it was granted through the bargaining process. However, our analysis has been at the aggregate level for so long that there is little danger that we will ignore the economic and political variables. We need to provide a sounder analytical base for evaluating union, business and government actions that influence the bargaining process. Do guideposts help or hinder bargaining? Does mediation affect the outcome of bargaining, and would mediators be more or less effective if they represented the public interest? How would the threat of an imposed solution affect bargaining? What is the potential and what are the limitations of continuous bargaining—as contrasted with crisis fixed-term negotiations? What would be the effects of greater use of neutral third parties, as a regular part of the process? Field studies are undoubtedly important, but I doubt if the answers to many of these questions can come from the participants. I performed the neutral adviser role in one situation over an extended time period, and in addition to my own frustrations I found I could not satisfy my wife's queries about whether or what I was accomplishing. I am, of course, completely convinced that my role was positive and significant—but I would be hard pressed if pushed for evidence.

Our judgments on the new modes of bargaining behavior should be based on extensive research into the dynamics of bargaining behavior.

There is a possible danger in pursuing research into the bargaining process. My colleague, Herbert Simon, has suggested that perhaps collective bargaining works as well as it does only because the participants don't know too much about the game. He argues that detailed knowledge of the determinants of bargaining power and of the implications of different bargaining strategies might lead to a breakdown in the bargaining decision process. But it appears equally likely that more sophisticated bargainers will be less likely to reach an impasse when a solution exists that both parties would prefer to a strike. It should be possible to evaluate this question analytically. What would be the outcome of bargaining under various assumptions about the state of knowledge of the participants?

I feel obliged to touch on one last concept of bargaining, the legal definition of bargaining. In his recent study²² Philip Ross provides a succinct summary of the current state of the law:

"The employer must meet with the union at reasonably frequent intervals at a mutually agreeable time and place. He must refrain from bypassing the union and negotiating directly with his employees. He must not refuse to discuss the mandatory subjects of collective bargaining, which, under National Labor Relations Board doctrine, include not only wages and hours, but merit increases, bonuses, sub-contracting, work rules, pensions, stock-purchase plans, and any other subject which affects the terms and conditions of employment.

"In negotiating with the union, an employer must make a bona fide effort to come to terms with the union and cannot legally avoid the duty to bargain by 'surface bargaining,' 'shadow-boxing' or prolonged futile discussion. While concessions are not required, an employer must in good faith, so conduct his negotiations that his acts of commission and omission are consistent with the inference of a desire to reach an agreement."

There are eminent authorities who argue that it is useless or wrong to require employers to bargain in good faith, since the requirement cannot be enforced. Ross argues convincingly that the mandatory duty to bargain has been effective in spite of its limitations. But neither side of the debate has a substantial analytical basis for its belief. It should be possible to explore the implications of the behavior patterns

²² Philip Ross, *The Government as a Source of Union Power*, Providence, Rhode Island, Brown University Press, 1965, p. 2.

now required by law. Do they increase the probability of agreement? Do they add to the union's bargaining power? And perhaps of greater long-run significance, are there alternative formulations of the legal duty to bargain that would more effectively further our objectives for collective bargaining? Ross' empirical work is an important contribution, but the answers to questions of this type must be based on the analysis and study of bargaining behavior. We should try to determine if our legal concept of bargaining is consistent with the research findings based on a behavioral concept of bargaining.

In spite of the fact that bargaining has been conceptualized in many different ways, some of which I have found to be relatively sterile, it remains a key concept—or more accurately, represents several key concepts—in the field of industrial relations. The bargaining concept has shown vitality in that it continues to be redefined so that it can provide an effective base for a variety of different kinds of research. I believe it would be a mistake to try to force the structure back into one grand concept, although every effort should be made to explore the interfaces among the different interpretations of bargaining, and to build them together where that can be done meaningfully.

THE ANALYTIC MEANING OF SENIORITY

FREDERIC MEYERS*

This paper does not attempt to deal with the set of questions posed by the Chairman, Professor Derber. There is both an excuse and a reason. The excuse is that Professor Derber's letter setting forth the questions to be dealt with caught up with me in Europe, and was mislaid there. The reason is that the "concept" I am asked to deal with is qualitatively different than those presented to the other members of this panel. Prof. Siegal has analyzed the concept of job consciousness, an abstract term invented by a social scientist to describe what he saw as a characteristic of labor movements. Its purpose was analytic, and the questions posed by Prof. Derber are appropriate to ask of it. Prof. Joseph has dealt with the notion of bargaining, specifically, as his paper indicates, with collective bargaining. Again, if memory serves me well, collective bargaining is a concept invented by the Webbs to make more easily subject to analysis a process. Its usefulness may also be judged by Prof. Derber's criteria.

But seniority is a term of industrial origin, a word of art of the real world, rather than a concept invented by social scientists. As such, the questions posed by Prof. Derber are irrelevant to it. As social scientists, we cannot retain or discard it as useful or not. It is part of the object of our study. My purposes then, will be to subject the term to analysis in an effort to indicate what meaning the social scientist can draw out of it, and the practices which it describes, as a contribution to the understanding of our subject matter.

Seniority is the application of the criterion of length of service for the calculation of relative equities among employees with respect to their claims to jobs and prerogatives related to employment within the collectively determined scope of application of the criterion.¹ It may not be the only applicable criterion, and, with respect to certain claims or prerogatives, may not be applicable at all.

This definition emphasizes the affirmative function of seniority—to allocate claims and to establish priorities as between conflicting

* Professor of Industrial Relations, University of California, Los Angeles

¹ It is at least conceivable that the scope of exercise of seniority might in certain circumstances, go beyond that determined collectively. See *Zdanok v Glidden*, 288 F. 2d 99 (1961); *Glidden v Zdanok*, 370 U.S. 530 (1962); *Zdanok v Glidden*, 47 CCH 18211; 48 CCH 18724; cert denied 377 U.S. 934.

claims. That there are other criteria possible and, in many situations applicable, is patent. Among these others are objectively determined skill and efficiency, economic need or convenience, or the ability subjectively to please the employer, the foremen or others responsible for making the allocative decision. That all, and perhaps others, appear singly or in combination with others in industrial relations practice indicates that each appeals to some fairly widely held aspect of our industrial value system.

The development of the practice of seniority is usually attributed to union pressure, and the reasons for the development of that pressure are commonly given as the elimination of favoritism in treatment of workers in significant aspects of their employment, either on a personal basis, or because of the employee's institutional relation to the union, and as a device to allocate employment, promotion and other opportunities. These two commonly given reasons taken together constitute the choice of one set of values over another. They say that unrestricted employer choice is not tolerable in those segments of industrial society in which unions seek seniority rules; rather, that greater length of service creates a right to preferential allocation of prerogatives in employment superior to those created by shorter service.

It is so that formalized and enforceable seniority rules awaited the development of union pressures; it is doubtful that the set of values expressed in seniority rules are unique to the labor movement or that seniority was an invention of the labor movement. I suspect that it would long have been regarded as an abuse of managerial prerogative to dismiss a long service worker for arbitrary reasons of personal favoritism or even of anti-union bias. The incorporation of seniority rules in collective agreements has been, in many ways, a codification of social norms and a clearer choice of priorities among values.

Historically, seniority rules seem to have been developed earliest on the railroads. They appear to have been among the concessions gained by the operating railroad unions as their strength developed after the Civil War.² The legal effect of railroad seniority clauses was the subject of court proceedings long before those in any other industry.³

It is relevant to ask why this was so; why seniority rules appeared

² William J. Cunningham, "The Locomotive Engineers' Arbitration: Its Antecedents and its Outcome," *Quarterly Journal of Economics*, February, 1913, p. 268.

³ See: Note, 51 *Harvard Law Review* 522 (1958).

first on railroads, and not among others of the organized or partially organized industries of the period. The answer seems to me to lie in the fact that railroading was perhaps the first industry to be effectively organized in which the attachment of the employee was essentially to a particular employer rather than to the industry, or the craft. As George Taylor has observed, "there are many industries . . . in which the employees look to the market rather than to the employer for their job security."⁴ While Taylor observes that where the employee look to the employer rather than to the market, "seniority is thus a means of providing work guarantees for a variable and fluctuating number of employees,"⁵ the essence seems to me not to be in that fact—railroads have, after all, until recently offered greater stability of employment than most industries, and certainly more than those in which employees are market-oriented such as garments, construction or longshoring. The essence seems to me to be the scope of that collection of job opportunities in which the employee regards himself as having a continuing equity.

In fact, I have seen the written response of a British trade unionist in the engineering industry, to a questionnaire about the applicability of seniority in his industry. It argued that plant or employer seniority was less desirable than seniority whose scope extended either over attachment to the entire industry or was measured by the length of union membership. Despite the bitterness of disputes among employees over merging of seniority lists in cases of mergers, consolidations and the like, continuing instability of employment in the seniority industries could conceivably lead, not to a closed shop, but to multi-employer definition of seniority districts for layoff and rehire purposes.

Much of early trade union organization was, of course, of craftsmen whose appellation as "journeymen" quite literally described them. They were, by the nature of the industries in which they worked, highly mobile from employer to employer. For these reasons, they looked to a broader market than the single employer for their right to work. The unique bargaining characteristic of these industries was and is, rather than the application of seniority rules to employment and layoff problems, the closed shop over the scope of this broader market.

⁴ George W. Taylor, "Seniority Concepts," in *Arbitration Today*, Proceedings of the Eighth Annual Meeting of the National Academy of Arbitrators, Washington, Bureau of National Affairs, 1955, p. 132.

⁵ *Ibid.*, p. 129

The closed shop is categorized as a form of union security, which implies that it serves one of the functions attributed to seniority—to protect against discrimination for reasons of union affiliation. In the case of the closed shop the emphasis is commonly put on institutional security of the union, while as to seniority, the emphasis is commonly put on protection of the individual. But the essential distinction between the closed shop and the forms of union security which prevail in the noncasual industries is the way in which it stakes out a job territory belonging to the union as an established collectivity of owners of equities in that territory. Forms of union security which depend on post-hiring compulsion to join do not, alone, identify individuals with equities. Put that way, the closed shop performs at least one of the functions performed by seniority. It yields continuing equities in a defined scope of job opportunities.

A further analogy may be made, between the right of employers in industries characterized by seniority rules in layoffs to seek new employees only when employees with seniority are not on a layoff list and the clause common to agreements in closed shop industries under which employers may enter the open market only when the union is unable to supply qualified workers. Admittedly this analogy is imperfect in that, principally, the control of acquisition of enduring equities in the job territory lies more clearly with the employer in seniority industries, at least in periods of job expansion not following declines or exceeding past declines. But the evidence for the similarity of function is there.

That the functions are not completely overlapping is apparent. If they were, it would not be necessary for the Typographical Union to have sought both a form of seniority rule, "priority" and the closed shop, at least during that period in which the closed shop was not unlawful. But firm seniority rules were, relative to the extent of bargaining history of the Typographical Union, recent, and may have come as the structure of the printing industry became more like that of other seniority industries.⁶ In 1890, the rule in the newspaper industry appears to have been similar to that in the construction industry which gives the foreman virtually complete control over reductions in force and dismissals. Between 1902 and the first World War, the seniority

⁶ See the discussion of priority rules in daily newspapers by Robert K. Burns and in Book and Job printing by Emily Clark Brown in *How Collective Bargaining Works*, N.Y., Twentieth Century Fund, 1945.

rule was developed to apply both to layoffs and hires. In book and job printing, it was not until the 'twenties that the application of seniority rules began in the large metropolitan areas. It may well be that this was the period in which the employees began shifting their horizons from the market to the employer, losing their literal characteristic as journeymen when large and stable newspaper and job printing establishments developed.

Emily Clark Brown, after noting the slow development of seniority rules among Pressmen and Bookbinders notes that " recent developments have made these unions look more favorably upon seniority provisions. Technical changes, which have somewhat reduced the advantage of the old experienced man, plus severe unemployment, make some members envy the security given by the priority law in the composing room. Moreover, in the big pressrooms and binderies, where considerable groups of workers perform the same class of work, it is more feasible to operate, in part, at least, on a seniority basis. When these large plants are isolated in small towns there is a strong case for protection of seniority rights, since the only jobs are those in one plant. Seniority provisions have become very general in these big plants, in contrast to the situation in the older areas with many smaller shops."⁷

The overlapping of functions performed by the closed shop and seniority rules is illustrated, of course, by the recourse had by certain of the maritime industries to seniority when the Taft-Hartley Act made their traditional closed shop practices unlawful. The emphasis in contemporary discussion of this apparently novel approach was to the search for union security. Of course it had the effect of assuring greater institutional security to the Union than would have been the case without either rule. But equally important, the new rule preserved the existing equities of employees in job opportunities in much the same way as had their old hiring hall. And, as we have argued, seniority may also in the more ordinary case serve the goal of institutional security—that is what is meant in part when the rule is defended as a device to prevent discrimination against union members.

Most of us are familiar with the industry characteristics which have given rise to closed shop practices; in a sense, then, it is the industries with the obverse characteristics which give rise to seniority

⁷ Ibid.

practices. Dr. Taylor has emphasized the element of craft.⁸ Undoubtedly this was of the essence in earlier historical periods. The corporate body of craftsmen had a sense of ownership over the exercise of their unique skills, and wage setting and work assignment practices reflected this. But it was also true that traditionally craftsmen were journeymen: they journeyed from job to job and from employer to employer. Contemporarily it is a little difficult to describe hod carriers and common laborers, truckdrivers or longshoremen as craftsmen in the original sense. Closed shops grow up not only among craftsmen, or even always among craftsmen. But the closed shop or a reasonable lawful or unlawful approximation thereof grows up in industries in which the usual term of a particular job is short, so that seniority rules as a device for protecting an equity in a particular job with a particular employer would be meaningless.

Seniority rules as to layoffs and rehires, then, serve, as does the closed shop, to establish equities in jobs and in job opportunities. Local union jurisdiction defines the outer boundaries of the property in closed shop industries as does the bargaining unit in seniority industries. Craft lines or jurisdictions subdivide the claims in closed shop industries. The bewildering array of departments, job families, and other forms of defining seniority districts within a bargaining unit serve somewhat similarly to subdivide the claims in seniority industries. And disputes at the boundaries are often as bitter in seniority industries as they are between crafts. Both seniority and craft jurisdiction make cannibals of men.

Seniority rules applicable to layoffs are sometimes seen as alternatives to work-sharing.⁹ But they are in no way mutually exclusive. There is implicit in the practice of the closed shop that work shall be shared more or less equally among those holding equities in the job territory, but as the Typographical Union arrangements indicate, the closed shop does not necessarily mean that equities may not be unequally divided. Similarly, a seniority rule does not necessarily mean that equities must be unequally divided. Mileage limitation rules in the railroad operating crafts, the oldest bastion of seniority, are indicative of the possibilities.¹⁰ Various forms of guaranteed annual wage

⁸ *Op. Cit.*

⁹ See George W. Taylor, *op. cit.*

¹⁰ Emily Clark Brown also observes that seniority and work-sharing co-existed in printing pressrooms. Such combination of rules have become increasingly common.

or income plans provide incentives to employers to make more equal the value of unequal seniority rights.

It must be admitted that inequality of equities is of the essence of seniority rules. In addition to defining the boundaries within which equities are accumulated, the rule provides an ordering of them. In this major respect it differs from the closed shop rule. The closed shop simply defines the boundaries and identifies those who fall within it, without any automatic order of claim. Seniority defines that order as well as the boundary. The closed shop does not say who will be out of work at a moment of time, or have access to a promotion opportunity. Seniority does.¹¹ But it should be made explicit that a seniority rule does not necessarily determine the measure of the inequality of equity shares. Other rules, such as hours of work, guarantees of work or income, or explicit work-sharing rules determine, under a variety of possible circumstances, the relative values that attach to a place in the order of claim.

Another frequent distinction between closed shop and seniority industries is the fact that in some of the former, agreements are marked by the absence of protection of the employee against dismissal from a specific job without a good or just cause. Construction industry agreements rarely contain the familiar dismissal clause. The reason may well be that dismissal from a specific job does not, in the closed shop industries, result in total loss of equity in the job territory and, indeed, may not mean, in the long run, any loss in access to work. Whether it does or not depends randomly on the chance of the draw of succeeding work opportunities—for the dismissed worker and his replacement and others affected by the order of assignment.

In the seniority industries, dismissal results in total loss of equity. But it has been held that an unqualified seniority clause is the equivalent of explicit protection against individual dismissal without adequate cause.¹² The modern arbitrator, faced with a grievance alleging dismissal without good cause under a contract which had no specific protection might hold that such was an implied clause in any collective agreement. But if the agreement had a seniority clause he might well hold that that clause established an equity that could not be impaired without adequate cause. Thus, the additional protection of equity

¹¹ Because craft often defines a boundary of the closed shop, promotion is commonly not an issue.

¹² See cases cited in Note, 51 *Harvard Law Review* 522 (1958).

afforded by the usual just cause agreement, in the face of an unqualified seniority clause, may well be redundant.

Seniority rules, of course, serve other functions than those thus far mentioned. We have observed that the drawing of seniority districts is in some ways analogous to the affirmation of craft property in craft jurisdictions. It is undoubtedly true that craft boundaries are usually less easily crossed in the closed shop industries than are seniority district lines in the seniority industries. Career progressions of some kind are the usual, though not the universal concomitant of seniority rules. It should be remarked, however, that qualification of seniority with other criteria are more frequent when movement across these lines is involved than at the point of ingress or egress to or from the boundaries of the collective job property. Seniority also may apportion such other prerogatives as vacation periods, shift assignment and a host of others.

Looking at both seniority and closed shop industries, however, at least by comparison with most industrial relations systems in which the individual contract of employment is the cornerstone of rights and obligations, the distinct attribute of each is the possibility of claims to employment rights of persons who are not currently in employment. In the case of the closed shop industries these are union members out of employment and, under the rules of the hiring hall, the agreement and the union, entitled to claims on work opportunities as they may appear within the boundaries of the closed shop jurisdiction. As to seniority industries, they are persons once employed who, under the agreement, continue on a layoff list.

The essential meaning of these continuing claims seems to me to be their expression of a property-like relation of the worker to a definable set of work opportunities—an affirmative right which find its most efficient expression in the structure of certain industries in a closed shop. Under other industry characteristics, the efficient expression is the seniority rule.

The more useful analytic meaning of seniority, then, seems to me to be this affirmative expression, rather than the negative one of prevention of various forms of discrimination. To be sure, seniority often found its formal justification as an anti-discriminatory measure. But reaction against discrimination implies a sense of right, that is, of equity in both of its double meanings. It expresses in a form appropriate to particular industrial situations, the notion that people acquire

property-like rights in employment opportunities, and the prerogatives that are to be shared, within given boundaries.

Inherent in the merely anti-discriminating view of seniority is the thought that more "rational" criteria for layoffs and rehires, promotion opportunities and other prerogatives might be applied if, somehow, the fear of discrimination could be allayed. Such "rational" criteria would be efficiency, skill or "merit." I believe this is the kind of mistaken conclusion that follows from emphasis on a consequence of, or a rationalization for, seniority rules. Such an emphasis conceals the underlying conflicts of values and notions of property. For while workers may abstractly share social values about industrial efficiency, they also sense that kind of "ownership" which finds its expression in seniority rules, closed shops and a host of other ways of institutionalizing their claims. It may be that among certain kinds of white collar and professional workers, the social value of efficiency takes priority. Among industrial workers generally the converse may well be true, and, if so, no amount of assurance of objectivity in the application of measures of efficiency will succeed in abating significantly continuing demands for seniority where it is the appropriate expression of the prior value.

VII

CONTRIBUTED PAPERS

UNEMPLOYMENT IN A CHANGING LABOR MARKET

Gertrude Bancroft, Chairman

THE IMPACT OF MASS LAYOFFS ¹ JULY 1963-JUNE 1965

ROBERT F. SMITH
Louisiana State University

INTRODUCTION

Amid the recent intensified interest in policies and programs dealing with manpower development and utilization, the terms "manpower agency" and "active and positive manpower policy" have been widely used as descriptions of the role of the United States Employment Service (USES).² Implicit in the concept of an active and positive manpower policy is what Professor Bakke calls the "preventative function." He describes the preventative function as ". . . to anticipate imbalances, either shortages or surpluses, of manpower, in either the short or the long run, and to take action to prevent the occurrence of those imbalances."³ Many of the activities of the USES and the affiliated employment services of the 50 States have always had a preventive element, but in recent years there has been a more definite emphasis on specific preventive efforts. Such programs as area skill surveys, automation pilot studies, the selection of courses for manpower training, surveys of job vacancies, and special counseling for school dropouts and technologically displaced workers represent efforts directly related to the anticipation of manpower imbalances.

In an attempt to implement another specific preventive activity an exploratory survey was made during the summer of 1961 to determine the willingness of employers to give advance notice to the public em-

¹ This paper was written during July and August 1965, while the author served as consultant to the Bureau of Employment Security, United States Department of Labor. He is indebted to Vladimir Chavrid, Edward Salner, and Lester Rindler of the United States Employment Service for their assistance in the study. Opinions and conclusions presented, however, are solely those of the author, and no part of this paper is to be interpreted as a statement of policy on the part of the Bureau of Employment Security.

² See, for example, E. Wight Bakke, *A Positive Labor Market Policy* (Columbus, Ohio: Charles E. Merrill Books, Inc., 1963); William Haber and Daniel H. Kruger, *The Role of the United States Employment Service in a Changing Economy* (Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research, 1964); and Louis Levine, "An Employment Service Equal to the Times." *Employment Security Review*, XXX No. 6 (June 1963), pp. 3-13.

³ U.S. Congress, House, Committee on Education and Labor, *Hearings on H.R. 11976, H.R. 8547, and H.J. Res. 607, Public Employment Service*, 88th Congress, 2d Session (Washington; U. S. Government Printing Office, 1964), p. 20.

ployment service of production changes that would seriously affect employment.⁴ Based on the favorable results of this survey a program for reporting mass layoffs was instituted in September 1962. Although the preliminary survey was limited to the possibility of identifying significant changes specifically related to the introduction of new production techniques, the reporting program was established to provide advance notice of all large layoffs, whatever the cause.

Under the mass-layoff reporting program, the local public employment offices have the responsibility for identifying mass layoff situations and developing plans to deal with them. The local offices prepare detailed reports on all actual or impending nonseasonal layoffs of 100 or more workers. The report includes the industrial classification of the establishment, the sex and occupations of the workers to be laid off, the date (or dates) of the layoff, the cause of the layoff, and plans developed or actions taken to assist the workers affected by the layoff. The use of a level of 100 workers to define a mass layoff is an arbitrary measure; it is recognized that the impact of a layoff will depend upon the size of the labor area, the nature of the labor area conditions at the time, and the characteristics of the workers involved. These differences are expected to be reflected in the types of manpower services provided. In many cases regular local office services (including interviewing, counseling, testing, and referral to training and jobs) are quite adequate. In other cases a program of special manpower services may be warranted. These services have included registering and interviewing workers at the plant, group counseling, intensified job development and interarea recruiting activities, and working with local economic development agencies to develop training programs. The effectiveness of these special services is increased if they are developed before a mass layoff actually occurs.⁵

In addition to the objective of identifying a mass layoff situation early enough to enable both employers and workers to adjust to the impact of the layoff, the reports of mass layoffs are also helpful in indicating longer run changes in employment opportunities. While the advance notice feature implies a "looking ahead" approach, the sum-

⁴ E. E. Liebhafsky, "Improving the Operation of Labor Markets Through an Employment Service Advance Notice System," *Southern Economic Journal*, XXIX No. 4 (April 1963), pp. 317-325.

⁵ For a discussion of some of the special services that have been developed for mass layoff situations, see Henry Smith, "ES Experience With Advance Notice of Mass Layoff," *Employment Service Review*, Vol. 1, No. 4 (April 1964), pp. 49-51.

mation of the reports (ES-235) provides a description of what has happened with respect to reported mass layoffs. Much information concerning the nature and impact of mass layoffs is automatically provided as a by-product of the advance notice system.

This paper reports the results of a study that was primarily concerned with the usefulness of the by-product information obtained in the mass layoff reporting program. The purpose of the study was to show the areas, industries, and occupations that have been most affected by mass layoffs during the past two years. The study was made by analyzing all reports of *actual permanent* layoffs that occurred from July 1963–June 1965.

State agencies are requested to submit a report on each mass layoff that comes to their attention.⁶ Local offices are expected to report mass layoff situations discovered through regular visitation programs of employer-relations representatives or any other means. Reports of mass layoffs have been received from every state. It would seem that a layoff of 100 or more workers is large enough to attract attention in even the largest labor areas and the pattern of the reports received so far indicates that the coverage has been quite comprehensive. The areas from which few reports have been submitted are areas in which few mass layoffs would be expected. No attempt has been made, however, to estimate the extent of mass-layoff activity that might have not been reported.

MASS LAYOFF ACTIVITY—JULY 1963–JUNE 1965

During the period July 1963–June 1965, mass layoffs involving 187,333 workers were reported in 525 establishments. As would be expected, mass-layoff activity was concentrated in the more highly industrialized sections of the Nation. Over one-fourth of the establishments involved in mass layoffs were in the Middle Atlantic States (New York, New Jersey, and Pennsylvania). There were also a substantial number of mass layoffs in the East North Central States (Ohio, Indiana, Illinois, Michigan, and Wisconsin) and the Pacific States (Washington, Oregon, California, Alaska, and Hawaii).

The extent of mass layoff activity in the Middle Atlantic and East North Central States was comparable to these States' proportion of the

⁶ U.S. Department of Labor, Bureau of Employment Security, "Manual Transmittal Letter No. 821," June 8, 1962. For a complete explanation of the instructions for reporting mass layoffs, see Bureau of Employment Security, *Employment Security Manual*, Part III, Section 7200.

Nation's total employment. The States in these areas accounted for 42.8% of the Nation's total employment in 1963, and they accounted for 48.6% of the establishments and 44.1% of the workers reported as affected by mass layoffs during the past two years. In both the Southern Region (including the South Atlantic, East South Central, and West South Central census divisions), and the Pacific States, however, there were substantial differences between the extent of mass lay-off activity and the proportional distribution of total employment in the United States. Relative fewer mass layoffs would be expected in the Southern States because of the high proportion of relatively small firms. In 1963, the States in the Southern Region accounted for 26.8% of the Nation's total employment, but they accounted for only 13.9% of the establishments and 9.4% of the workers affected by mass layoffs in the July 1963-June 1965 period. On the other hand, the Pacific States, in which there are a number of large defense-related establishments that are characterized by substantial changes in employment, accounted for 18.7% of the establishments and 27.0% of the workers affected by mass layoffs although they accounted for only 12.4% of the Nation's total employment in 1963. Thus, the mass layoffs that occurred in the Pacific States were generally much larger, in terms of numbers of workers affected, than the layoffs in other sections of the country (See tables 1 and 2).

Another distinguishing characteristic of the mass layoffs in the Western Region is that a majority of the layoffs occurred in establishments that were remaining open. In most sections of the country establishments that were closing down accounted for the largest number of layoffs. In the East North Central States, for example, over two-thirds of the affected establishments were closing down. Only 36% of the affected establishments in the Western Region were closing (See table 1). Again, this indicates that the layoffs in the Western Region have primarily been in large establishments with fluctuating employment.

EXTENT OF ADVANCE NOTICE

Table 3 shows the extent to which the local offices of the public employment service obtained advance notice of mass layoffs during the past two years. Some advance notice was obtained from 363, or 69.2% of the 525 establishments. The workers laid off in these 363 establishments totaled 141,760, or 75.7% of the total number of workers affected. Therefore, the local offices did have at least some warning of

the layoffs involving the majority of the 187,333 workers. Table 3 also indicates that a longer notice was generally received in the cases of the larger layoffs. Only 7.2% of the establishments gave advance notice of six months or more, but the workers laid off from these establishments accounted for 17.9% of all workers affected. Over one-third (35.8%) of the establishments gave advance notice of more than one month, and the workers laid off in these establishments accounted for almost half (48.1%) of all workers affected. Since it is the larger layoffs that are the most likely to require the planning of special manpower services, this breakdown indicates that the reporting program has functioned well with respect to obtaining notice of impending layoffs.

INDUSTRIES AFFECTED

Mass layoffs reported during the past two years were heavily concentrated in manufacturing establishments. Although employment in

TABLE 1
Number of Establishments and Workers
Affected by Mass Layoffs
July 1963-June 1965

Census Division ¹	Number of Establishments			Number of Workers
	Total	Remaining Open	Closing	
New England	59	21	38	17,819
Middle Atlantic	146	65	81	46,433
East North Central	109	33	76	36,072
West North Central	31	13	18	12,635
South Atlantic	41	21	20	10,879
East South Central	15	5	10	3,651
West South Central	17	4	13	3,261
Mountain	9	6	3	5,923
Pacific	98	62	36	50,660
TOTALS	525	230	295	187,333

¹ Census Divisions include the following states: NEW ENGLAND—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; MIDDLE ATLANTIC—New York, New Jersey, and Pennsylvania; EAST NORTH CENTRAL—Ohio, Indiana, Illinois, Michigan, and Wisconsin; WEST NORTH CENTRAL—Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; SOUTH ATLANTIC—Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; EAST SOUTH CENTRAL—Kentucky, Tennessee, Alabama, and Mississippi; WEST SOUTH CENTRAL—Arkansas, Louisiana, Oklahoma, and Texas; MOUNTAIN—Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada; PACIFIC—Washington, Oregon, California, Alaska, and Hawaii.

Note: Source of mass layoff data for all tables—Establishment Report of Mass Layoff (Form ES-235)

TABLE 2
 Distribution of Total Employment,
 Number of Firms Reporting Mass Layoffs, and
 Number of Workers Affected by Mass Layoffs
 July 1963–June 1965 by Census Division

Census Division	Total Employment ¹ Annual Average 1963	Number of Establishments Reporting Mass Layoffs	Number of Workers Affected by Mass Layoffs
	53,502,700	525	187,333
	%	%	%
New England	6.8	11.2	9.5
Middle Atlantic	21.5	27.8	24.8
East North Central	21.2	20.8	19.3
West North Central	7.7	5.9	6.7
South Atlantic	13.7	7.8	5.8
East South Central	5.2	2.9	1.9
West South Central	7.9	3.2	1.7
Mountain	3.6	1.7	3.2
Pacific	12.4	18.7	27.1
	100.0	100.0	100.0

¹ Excludes employment in agriculture and contract construction.

SOURCE: *Employment and Earnings Statistics For States and Areas* 1939–63, U. S. Department of Labor, BLS Bulletin 1370–1, 1964.

manufacturing industries constituted less than one-third of total non-agricultural employment in the United States in 1963, these industries accounted for 85.5% of the establishments and 90.9% of all workers affected by mass layoffs. The relatively few mass layoffs in the other major industries can be explained by the growth and typical stability of employment, as in the provision of government services, the transportation, communication, and public utilities and wholesale and retail trade industries, and the predominance of relatively small establishments, as in the finance, insurance, and real estate, and other service industries.

Table 4 shows a breakdown of the 450 establishments and 170,266 workers affected by mass layoffs in each of the major (2-digit SIC codes) manufacturing industries. The manufacturing industries that were most involved in mass layoffs included the transportation equipment, electrical machinery, ordnance, and textiles industries. Except for textiles, each of these industries is closely related to defense spending (See table 6). The transportation equipment industry included only 9.3% of the manufacturing establishments, but 28.4% of the workers in manufacturing affected by mass layoffs, indicating the very large number of workers involved in many of the layoffs in this indus-

TABLE 3
 Number of Establishments and Number of Workers
 Affected by Mass Layoffs July 1963-June 1965
 by Advance Notice of Layoff and Census Division

Census Division	Number of Days of Advance Notice									
	0		1-7 Days		8-30 Days		31-180 Days		Over 180 Days	
	No. of Est.	No. of Workers	No. of Est.	No. of Workers	No. of Est.	No. of Workers	No. of Est.	No. of Workers	No. of Est.	No. of Workers
New England	15	3,376	3	670	21	6,458	19	7,104	1	211
Middle Atlantic	44	9,863	19	6,605	28	7,673	46	15,486	9	6,806
East North Central	36	14,350	14	3,935	16	3,467	34	9,720	9	4,600
West North Central	10	3,586	2	771	9	1,500	6	5,386	4	1,392
South Atlantic	12	2,541	9	1,710	9	4,299	8	784	3	1,545
East South Central	5	696	2	289	4	1,160	4	1,478	1	28
West South Central	5	1,265	5	1,013	3	472	4	308	1	203
Mountain	1	302	1	936	3	2,444	3	1,650	2	591
Pacific	35	9,593	11	3,702	16	4,529	26	14,658	10	18,178
TOTAL	162	45,572	66	19,631	109	32,002	150	56,574	38	33,554
% of All Est.	30.8	-	12.6	-	20.8	-	28.6	-	7.2	-
% of All Workers	-	24.3	-	10.5	-	17.1	-	30.2	-	17.9

¹A few establishments reported layoff schedules covering several months. Such establishments were classified in the advance-notice category that seemed most meaningful for each particular case. Generally these establishments were classified in the advance-notice category that included the largest number of workers.

TABLE 4
 Number of Establishments and Number of Workers Affected by Mass Layoffs
 by Industry (Manufacturing) and Census Division July 1963-June 1965

Industry (Manufacturing) (2-Digit SIC Codes)		New England	Middle Atlantic	E. No. Central	W. No. Central	South Atlantic	E. So. Central	W. So. Central	Mountain	Pacific	Total Est. and Workers
Ordnance (19)	Est.	2	4	3	2	1	--	2	3	10	27
	Workers	601	1,621	2,127	600	551	--	697	3,781	14,522	24,500
Food (20)	Est.	2	15	5	6	2	2	1	--	6	39
	Workers	585	4,723	1,366	1,578	267	294	33	--	844	9,690
Tobacco (21)	Est.	--	1	--	--	--	--	1	--	--	2
	Workers	--	114	--	--	--	--	213	--	--	327
Textiles (22)	Est.	13	9	3	--	4	2	1	--	1	33
	Workers	4,593	1,534	529	--	1,892	699	249	--	117	9,613
Apparel (23)	Est.	3	12	2	--	1	1	--	--	--	19
	Workers	550	1,764	438	--	208	531	--	--	--	3,491
Lumber (24)	Est.	--	--	--	--	2	--	2	1	7	12
	Workers	--	--	--	--	238	--	510	183	1,116	2,047
Furn. & Fixt. (25)	Est.	--	4	5	2	1	2	--	--	2	16
	Workers	--	473	935	239	263	374	--	--	237	2,521
Paper (26)	Est.	--	5	1	--	2	--	1	--	1	10
	Workers	--	857	382	--	535	--	77	--	182	2,033
Printing (27)	Est.	--	1	2	1	--	--	1	--	1	6
	Workers	--	1,040	505	89	--	--	304	--	214	2,152
Chemicals (28)	Est.	--	3	2	--	5	2	1	--	1	14
	Workers	--	511	510	--	2,366	618	184	--	240	4,429
Petroleum (29)	Est.	--	1	--	--	--	--	1	--	--	2
	Workers	--	114	--	--	--	--	135	--	--	249
Rubber (30)	Est.	3	2	3	--	--	1	--	--	1	10
	Workers	380	355	1,178	--	--	108	--	--	271	2,292

TABLE 4 (continued)

Industry (Manufacturing) (2-Digit SIC Codes)	New England	Middle Atlantic	E. No. Central	W. No. Central	South Atlantic	E. So. Central	W. So. Central	Mountain	Pacific	Total Est. and Workers
Leather Est. (31) Workers	9 2,416	-- --	6 1,636	3 907	-- --	1 156	2 286	-- --	-- --	21 5,401
Stone, Clay, Est. Glass (32) Workers	-- --	4 733	2 368	1 105	-- --	-- --	-- --	-- --	1 135	8 1,341
Prim. Metals Est. (33) Workers	-- --	9 3,027	6 1,606	-- --	1 110	1 214	-- --	-- --	4 726	21 5,683
Fab. Metals Est. (34) Workers	3 406	6 1,762	16 2,780	1 105	2 249	1 252	-- --	-- --	2 525	31 6,079
NonElect. Est. Mach. (35) Workers	3 644	6 618	6 924	3 688	-- --	-- --	1 164	-- --	9 1,619	28 4,657
Elect. Mach. Est. (36) Workers	9 2,221	27 6,949	20 7,571	4 1,896	5 1,105	1 291	-- --	1 195	21 7,870	88 28,098
Transportation Est. Equip. (37) Workers	4 2,030	5 10,321	8 8,665	4 6,078	2 620	1 114	-- --	1 1,380	17 19,201	42 48,409
Instruments Est. (38) Workers	2 266	6 4,401	3 1,421	1 112	-- --	-- --	-- --	-- --	1 119	13 6,319
Misc. Manuf. Est. (39) Workers	-- --	4 546	1 160	2 117	-- --	-- --	-- --	-- --	1 112	9 935
TOTALS Est. Workers	53 14,692	124 41,463	94 33,101	30 12,514	28 8,404	15 3,651	14 2,852	6 5,539	86 48,050	450 170,266

try. Layoffs in aircraft manufacturing, particularly in the Pacific States, were predominant in this industry.

Another industry that was characterized by layoffs involving large numbers of workers was the ordnance industry. Mass layoffs in this industry accounted for only 6% of the manufacturing establishments, but for 14.4% of the workers in manufacturing affected by mass layoffs. The layoffs in this industry were also heavily concentrated in the Pacific States.

Almost one-fifth (19.6%) of the manufacturing establishments affected by mass layoffs were in the electrical machinery industry. Layoffs in this industry were rather widely distributed throughout the nation with 27 affected establishments in the Middle Atlantic, 20 in the East North Central, and 21 in the Pacific divisions. The total of 28,098 workers affected by mass layoffs in the electrical-machinery industry represented 16.5% of all affected workers in manufacturing industries.

As would be expected, the impact of mass layoffs in some industries was much greater in some sections of the Nation than in others. Mass layoffs in the textile industry, for example, accounted for only 7.3% of the manufacturing establishments and 5.6% of the workers in manufacturing affected by mass layoffs, but layoffs in this industry accounted for slightly over 30% of all workers in manufacturing affected by mass layoffs in the New England States.

CAUSES OF LAYOFFS

The ES-235 Report contains a section in which the local office is requested to indicate the primary cause of the layoff and provide a brief explanation. Specifying a particular cause of a layoff is, of course, often extremely difficult. Some situations, such as cancellations of defense contracts, were relatively easy to classify but many situations reflected a mixture of factors which defied a simple classification. Using the narrative explanations as a guide, the reported layoffs were grouped into the following causes: defense related, competitive pressures, relocation, changes in production methods, consolidations and mergers, and other causes (including layoffs for which the cause was not ascertained).

Table 5 shows the distribution of establishments and workers affected by cause for each of the census divisions. The reports clearly showed the importance of defense-related cutbacks and plant closings

TABLE 5

Distributions of Establishments Reporting Mass Layoffs
and Number of Workers Affected by Cause of Layoff and Census Division

Census Division	Total No. of Estab.	% Distribution of Establishments by Cause					
		Defense-Related	Competitive Pressures	Relocation	Changes in Prod. Methods Incl. Automation	Consolidations and Mergers	Other and N. A.
New England	59	15.2	32.2	27.1	--	15.3	10.2
Middle Atlantic	146	19.9	15.1	20.5	1.4	10.3	32.8
East North Central	109	11.9	14.7	41.4	1.8	7.3	22.9
West North Central	31	16.1	19.4	25.8	3.2	12.9	22.6
South Atlantic	41	26.8	26.8	9.8	2.4	4.9	29.3
East South Central	15	13.3	40.0	6.7	--	6.7	33.3
West South Central	17	23.5	11.8	11.8	--	5.9	47.1
Mountain	9	33.4	--	--	11.1	11.1	44.4
Pacific	98	33.7	13.3	11.2	3.1	10.2	28.5
TOTAL	525	20.8	18.1	22.3	1.9	9.7	27.2
	Total No. Workers Affected	% Distribution of Workers Affected by Cause					
New England	17,819	22.2	28.9	24.4	--	15.8	8.7
Middle Atlantic	46,433	40.1	14.2	12.8	.5	5.0	27.4
East North Central	36,072	18.0	12.6	52.3	1.2	3.9	12.0
West North Central	12,635	59.8	9.0	8.2	6.9	4.5	11.6
South Atlantic	10,879	44.7	25.2	7.5	1.4	3.7	17.5
East South Central	3,651	20.9	36.4	8.0	--	14.5	20.2
West South Central	3,261	30.1	9.2	7.4	--	9.3	44.0
Mountain	5,923	84.6	--	--	1.8	2.6	11.0
Pacific	50,660	74.6	5.1	3.6	.8	4.9	11.0
TOTAL	187,333	45.9	13.0	17.8	1.2	5.9	16.2

in mass-layoff situations. Moreover, mass layoffs stemming from this cause tended to be rather large ones in terms of number of workers affected. Completion or cancellation of defense contracts was indicated as the cause of layoff for 109 (20.8%) of the 525 affected establishments, but these establishments included 86,021 workers or 45.9% of the total.

Table 6 shows the number of establishments affected by mass layoffs by cause and industrial classification. Mass layoffs which were classified as being defense related were concentrated in the ordnance, electrical-machinery, and transportation equipment industries, and government establishments.

The reports indicated that changes in production methods, including the adoption of automated techniques, was a relatively minor fac-

TABLE 6
Number of Establishments Reporting Mass Layoffs by Cause and Industry

Industry	Number of Establishments						
	Total No. of Estab.	Defense Related	Competitive Pressures	Relocation	Changes in Prod. Methods (incl. Automation)	Consolidations and Mergers	Other and N. A.
Mining	14	.....	6	.....	1	.....	7
Manufacturing	450	87	87	109	7	46	114
Ordnance	27	24	.....	.....	.....	1	2
Food	39	.....	7	10	1	8	13
Textiles	33	.....	13	9	.....	2	9
Apparel	19	.....	5	6	.....	2	6
Chemicals	14	6	3	1	1	.....	3
Prim. Metals	21	2	8	2	1	2	6
Fab. Metals	31	1	4	12	.....	4	10
Nonelect. Mach.	28	.....	2	9	.....	4	13
Elect. Mach.	88	26	14	24	.....	7	17
Trans. Equip.	42	23	6	7	.....	3	3
Instruments	13	5	.....	7	1	.....	.....
Other Mfg. ¹	95	.....	25	22	3	13	32
Trans., Comm., Pub. Util.	8	2	.....	.....	1	2	3
Wholesale and Retail Trade	11	1	1	2	.....	2	5
Finance, Ins., Real Estate	3	.....	.....	1	.....	1	1
Services	26	9	1	4	.....	2	10
Government	13	10	.....	1	1	.....	1
TOTAL	525	109	95	117	10	53	141

¹ Includes tobacco, lumber, furniture and fixtures, paper, printing and publishing, petroleum products, rubber, stone-clay-glass, and miscellaneous manufacturing.

tor in the mass layoffs that have occurred during the past two years. In only 10 (1.9%) of the 525 establishments involving 2,166 (1.2% of the 187,333 workers) was this listed as the primary cause of the layoff.

This classification of causes, however, probably understates the overall impact of technological change as a factor in mass layoffs. Many of the layoffs classified as caused by relocations involved the movement of an establishment, often to another section of the Nation, in order to take advantage of improved production methods. Such layoffs were classified as being caused by relocations because although technological advances may well lead to some reduction in labor re-

quirements, it is actually the relocations that result in the mass dislocations of workers.

OCCUPATIONS AFFECTED

There was a total of 500 separate occupations (using the 3-digit *Dictionary of Occupational Titles'* codes) represented among the 187,333 workers covered in this study. A few reports, however, did not include the occupations of the workers laid off and some reports grouped several occupations in which there were only a few workers into a miscellaneous category. Table 7 shows the major occupational classifications of the 162,823 workers for which occupational data were available.

In line with the types of industries that have been most affected by mass layoffs, table 7 shows that the workers affected were heavily concentrated in blue-collar occupations. Skilled, semi-skilled, and unskilled workers accounted for only 36.4% of total employment in 1963, but workers in these groups accounted for 75.6% of the 162,823 workers (those whose occupations were identified) included in this study. Table 7 also shows, however, that mass layoffs in the Western Region have included substantial numbers of workers in professional and technical and clerical occupations.

Although there were a large number of specific occupations (500) involved in mass layoffs, a relatively few of these occupations included the majority of the workers laid off. There were 43 specific occupations that included 1,000 or more workers. Workers in these 43 occupations totaled 102,927 and accounted for 54.9% of all workers covered in the study and 63.2% of those whose occupations were identified. The occupations that included the largest number of workers were miscellaneous (not aircraft or motor vehicle) mechanics and repairmen (DOT 583), semi-skilled workers in the manufacturing of radios, phonographs, and related products (DOT 698), semi-skilled and unskilled workers in the manufacturing of electrical equipment (DOT's 700 & 900), skilled, semi-skilled, and unskilled workers in machine shop occupations (DOT's 478, 678, & 878), and semi-skilled and unskilled workers in automobile manufacturing (DOT's 702 & 902). The majority of these workers were laid off in the electrical-machinery and transportation equipment industries.

TABLE 7
Workers Affected by Mass Layoffs by Occupational Group and Census Region

Regions	Total No. of Persons Involved in Mass Layoffs	No. in Unidentified Occupations	Total in Identified Occupations	% of Total in Identified Occupations								
				Prof. & Tech.	Managerial	Clerical	Sales	Service	Agri.	Skilled	Semi-Skilled	Un-Skilled
Northeast	64,252	7,951	56,301	7.4	1.3	9.7	1.6	2.3	.1	23.3	32.4	21.9
North Central	48,707	3,621	45,086	4.2	.4	7.8	.2	2.2	....¹	24.8	31.8	28.6
South	17,791	1,330	16,461	5.9	.5	7.7	.2	2.8	.2	22.0	44.1	16.6
West	56,583	11,608	44,975	18.9	1.7	15.3	.8	2.2	....¹	28.1	20.3	12.7
TOTAL	187,333	24,510	162,823	9.6	1.1	10.5	.8	2.3	....¹	24.9	30.1	20.7
Distribution of Total Employment in 1963				12.0	10.6	14.9	6.3	13.1	6.7	13.0	18.2	5.2

¹ Less than .05%.

SOURCE: *Monthly Report on the Labor Force*, U. S. Department of Labor, January, 1964, p. 50.

CONCLUSIONS

This study clearly points to changes in defense spending as a primary factor in mass layoffs. Defense-related cutbacks or plant closings were reported as the primary cause of the layoffs involving 20.8% of the establishments and 45.9% of the workers affected by mass layoffs. This does not, of course, suggest an overall decline in defense-related activities, but it indicates the volatile nature of employment in establishments that are largely dependent on defense contracts and suggests the need for further study of the effects of defense spending in causing employment dislocations. Readjustments in defense spending will probably continue to have a great influence on employment shifts, but the nature of their impact may differ considerably from that shown in this study. A temporary reemphasis on conventional weapons, for example, might result in a national pattern of large layoffs quite different from what has occurred during the past two years.

The classification of specific industries and causes of layoffs (See table 6) shows an interesting paradox. Mass layoffs have been concentrated in industries that have been experiencing significant technological changes, and yet layoffs stemming *directly* from changes in production techniques have accounted for only a small proportion of the layoffs that have occurred during the past two years. This seems to suggest that although technological change may not often directly result in mass layoffs, such change alters the nature of the industry involved, and makes it more susceptible to employment dislocations that result from another specific cause. When one firm, or group of firms, in a particular industry introduces improved production methods, the result might well be employment dislocations in *other* firms in the industry with the cause best described simply as "inability to compete." Also, technological change may result in the concentration of production in a few large firms so that employment dislocations stemming from other causes, changes in defense spending, for example, are more centralized.

Since this is the first time that comprehensive data concerning mass layoffs have been available, it is not possible to say whether the involvement of 525 establishments and 187,333 workers is unusually large or small. The entire period covered in this study (July 1963–June 1965) was characterized by a rapidly rising level of economic activity nationally. A study of mass layoffs over a period that included some significant fluctuations in the level of economic activity would no

doubt show a much different impact on particular areas, industries, and occupations.

Because of the dynamic nature of the American economy, mass dislocations of workers are likely to occur, even in the most prosperous times. Advance notices of such dislocations can play an important role in facilitating the necessary readjustments of workers to new jobs, and the information obtained is helpful in evaluating the nature and impact of mass layoffs. This study presents a brief picture of what has happened during the past two years and provides a basis for comparing future mass-layoff activity.

THE USE OF LABOR FORCE PARTICIPATION AND UNEMPLOYMENT RATES AS A TEST FOR STRUCTURAL DIFFICULTIES*

WILLIAM H. GRUBER

Massachusetts Institute of Technology

During the last five years, there has been an interesting debate between "structuralists" and "inadequate demanders" over whether structural unemployment has worsened during the latter part of the postwar period.¹ The debate was initiated by uncertainty as to whether

* This paper is based on research that was done in a Ph.D. thesis in economics at MIT. The thesis committee members, R. Evans, C. A. Myers, and D. V. Brown, were very helpful in this endeavor. Professor Edwin Kuh contributed a number of sound ideas. Research support from the Center for Space Research at MIT is gratefully acknowledged. Leland Perry served as a very valuable research assistant in this effort. Naturally, credit is to be shared; all errors remain solely the property of the author.

¹ Otto Eckstein, paper in *Unemployment and the American Economy*, A. M. Ross, Editor (New York: Wiley, 1964).

L. E. Galloway, "Labor Mobility Resource Allocation, and Structural Unemployment," *American Economic Review*, Vol. LIII, No. 3 (September 1963), pp. 694-716.

R. A. Gordon, "Has Structural Unemployment Worsened?" *Industrial Relations*, Vol. 3, No. 3 (May 1964), pp. 53-77.

Walter Heller, paper in *Unemployment and the American Economy*, A. M. Ross, Editor (New York: Wiley, 1964).

Edward D. Kalachek, *The Determinant of Higher Unemployment Rates, 1958-60*, (Unpublished Ph.D. thesis in Economics at Massachusetts Institute of Technology, 1963).

James W. Knowles, "The Path of 1970," *The Conference Board Record*, Vol. 1, No. 11, (November 1964).

Charles E. Silberman, "The Real News About Automation," *Fortune*, (January 1965), pp. 124-126ff.

N. J. Simler, "Long-Term Unemployment, the Structural Hypothesis, and Public Policy," *American Economic Review*, Vol. 3, No. 4 (December 1964).

U.S. Congress, Joint Economic Committee, Subcommittee on Economic Statistics, *Higher Unemployment Rates, 1957-60: Structural Transformation or Inadequate Demand*, 87th Congress, 1st Session (Washington, D. C.: Government Printing Office, 1961).

Robert M. Solow, "The Nature and Sources of Unemployment in the United States," 1964 Wicksell Lectures, published by ALMQVIST & WIKSELL, Stockholm, 1964.

For some of the findings in support of an increase in structural difficulty, see: Thomas B. Curtis, *87 Million Jobs* (New York: Duell, Sloan, and Pearce, 1962).

U.S. Congressional Record, *Employment in the Dynamic American Economy*, Republican Policy Committee of the House of Representatives (87th Congress, 1st Session, 1961).

Clarence Long, Statement in Hearings Before the Subcommittee on Economic Statistics, United States Joint Economic Committee, 87th Congress, First Session (December 1961) *Employment and Unemployment* (Washington, D.C.: Government Printing Office, 1962), pp. 347-350, 376-383.

C. C. Killingsworth, paper read at a Conference on Employment Security at Michigan State University, October 26, 1963.

there were enough nonstructurally unemployed members of the labor force to make an aggregate demand policy feasible. The total rate of unemployment as an index of excess capacity was questioned, and research emphasis was concentrated on structural unemployment.

QUESTIONS SPECIFIED

The purpose of this paper is to expand the scope of the interest in structural difficulties by specifying more precisely the public policy questions that have been lumped together in many of the reported findings in this debate. The question of structural unemployment may be extended as follows:

- (1) Have increases in the structural nature of unemployment since 1957 been the cause of the rise in the total rate of unemployment from the level of 4 percent?
- (2) Have members of the population with low levels of education experienced relatively greater difficulty in attaining employment in the latter part of the postwar period, when the rise in the total unemployment rate is taken into account?
- (3) Have changes in the structural nature of unemployment made it more difficult to return through the use of increased aggregate demand to the 4 percent unemployment level that was experienced from 1955-57?

There now appears to be substantial agreement that the answer to the first question is negative. Structural difficulties have not caused the increase in the rate of unemployment since 1957. R. A. Gordon has summarized his findings on this question.

“Whether we concentrate our attention on teenagers (before 1963), on blue collar workers, on the unskilled, on non-whites, on the least educated, or on workers in the industries supposedly most affected by automation—in none of these cases has the unemployment situation worsened relatively when we take account of the rise in the total unemployment since the mid-fifties.”²

This paper will demonstrate that the answer to the second question is affirmative: members of the population with low levels of education have experienced relatively greater structural problems in the latter part of the postwar period—even after the rise in the total rate of unemployment is considered. This does not negate the findings of Gordon and others with similar conclusions, because their research was based on the structural nature of unemployment rates. It is possible to have

² Gordon, *op. cit.*, p. 54.

a sector of the labor force suffer a worsening disadvantage and still have a total unemployment situation with no greater structural imperfections. This can happen if the structurally affected sector diminishes in proportion to the total number of unemployed and if it is agreed to utilize labor force participation as well as unemployment rates as a test of structural difficulty.

METHODOLOGICAL CONSIDERATIONS

The basic methodology used in this paper to provide an answer to question two is the comparison of unemployment and participation rates by classes of educational attainment in 1950 and 1960.

It is important to observe the condition that the total rate of unemployment be taken into account. This condition is based on the finding³ that structural disadvantage tends to increase at higher rates of total unemployment. In order to satisfy this condition, the statistics given in this paper will be for 1950 and 1960—two periods of approximately equal total unemployment. One can question whether it is possible to select two periods of equal unemployment due to the increase in the interest in the proper definition of unemployment that has been experienced during the postwar period. There is every reason to believe that a “Hawthorne” effect resulted from the finding in 1950 that the census was poorer in quality than the CPS⁴ and the finding that there was a difference of almost 31 percent in the rate of unemployment between the 68 area CPS sample used to 1954 and the 230 area sample that started in 1954.⁵ It is probable that at a given level of “real” unemployment, the reported rate of unemployment in a later part of the postwar period is higher than the reported rate of unemployment earlier in the postwar period.

The volatility in the rate of unemployment can largely be explained by the fact that the rate of unemployment is a residual and is subject to all of the statistical problems inherent in residual analysis, i.e., a very small shift in the population creates a major shift in the residue. Let us

³ Solow, *op. cit.*, p. 36, for the utilization of this standard of comparing structural problems at equal levels of demand for labor.

⁴ Bancroft, G., “Current Unemployment Statistics of the Census Bureau and Some Alternatives,” in *The Measurement and Behavior of Unemployment*, National Bureau of Economic Research (Princeton: Princeton University Press, 1957), p. 75.

⁵ U.S. Department of Commerce, Special Advisory Committee on Employment Statistics, “The Measurement of Employment and Unemployment of the Bureau of the Census in its Current Population Survey,” (August 1954—Mimeo), p. 3.

assume that at a participation rate of 80 percent, 6 percent of a given group are called unemployed. Now let us assume that some members of the group considered to be out of the labor force and therefore not unemployed had dropped out of the labor force because of lack of demand for persons with their skills. If two percent of the total group had so dropped out of the labor force, then returning them to the labor force would increase the unemployment rate from 6 percent to 8 percent, a 33 percent increase in the rate of unemployment. This would increase the rate of labor force participation from 80 percent to 82 percent, an increase of only 2.5 percent.

The level of aggregation of statistics should be considered when analyzing structural problems. Unemployment and labor force participation rates may be given for many kinds of structure. When an attempt is made to find a relationship between two variables in an analysis that is loaded with many variables subject to countless permutations, it is necessary to be careful that combinations of variables do not lead to a relationship that is not valid if the combination is disaggregated. In simple notation:

Given: if $A + B$, then C

It is not possible to state: if A , then C

or: if B , then C

For example, if nonwhites tend to make up a large proportion of the educational class 8 years or less of attainment, and if this class has a relatively high unemployment rate, it is not known whether the high rate of unemployment results from lack of education or from discrimination against nonwhites. A first step in avoiding such confusion would be to examine the behavior of white unemployment rates by educational class.⁶ The level of aggregation is a key variable. If participation rates are analyzed for a class of workers such as white males 14 years of age and over, it may be found that the rate of labor force participation has decreased because of increases in the length of schooling. Thus a whole large class can be affected by a change in the behavior of a sector such as the age bracket 14–24 in this example. It would therefore be wise to attempt an analysis of white males of prime working ages (such as 35–44 years).

⁶The use of years of educational attainment for our structure also has limitations. This problem is extensively analyzed in W. H. Gruber, "Productivity, Education and Changes in the Labor Force," Unpublished Ph.D. thesis in economics at MIT, June 1965, pp. 110–123.

EMPIRICAL FINDINGS

The results for 1960 are presented in Charts I and II. The widely accepted decrease in the unemployment rate with increasing years of educational attainment should cause no surprise. The magnitude of the difference between low and high levels of educational attainment in labor force participation rates is of interest, particularly since we have here males of prime working ages. Wilcock⁷ has described the effect that changing levels of demand for labor will have on the "secondary" labor force. Such marginally attached members of the labor force are expected to move in and out of the labor force with the result that the volatility of the total rate of unemployment is lowered. Wilcock would consider white males of prime working ages to be "primary workers," and the magnitude of the difference in the labor force participation rates as a function of educational attainment therefore is unexpected.

From Charts I and II, it is possible to observe structural difficulties at one point in time in the latter part of the postwar period. The importance of using labor force participation rates as well as unemployment rates when testing for structural difficulty is also made manifest.

Charts III and IV present the changes between 1950 and 1960 in labor force participation and unemployment rates for white males of prime working ages (35-44 and 45-54). In both age classes the total rate of unemployment for the class was equal in 1950 and 1960. To some degree this satisfies the need to compare periods of relatively equal unemployment in order to examine structural changes at equal levels of demand for labor. The unemployment rates in 1950 have not been adjusted to 1957 definitions. This does not affect the participation rate changes between 1950 and 1960, but it does mean that part of the increase in unemployment is a result of the change in definitions. It would also mean that the total rate of unemployment in 1950 was higher than that in 1960 by this factor, thereby overcompensating for the equal unemployment standard for comparison between two time periods. The decrease in participation rates by 1960 reduces the level of unemployment in that year. Therefore, in terms of relative demand for labor as measured by the rate of

⁷ Wilcock, R. C., "The Secondary Labor Force and the Measurement of Unemployment," in *The Measurement and Behavior of Unemployment*, *op. cit.*, pp. 167-210.

CHARTS I AND II
 Unemployment and Labor Force Participation Rates vs. Education
 for White Males by Age: 1960

Chart I 35-44 yrs.

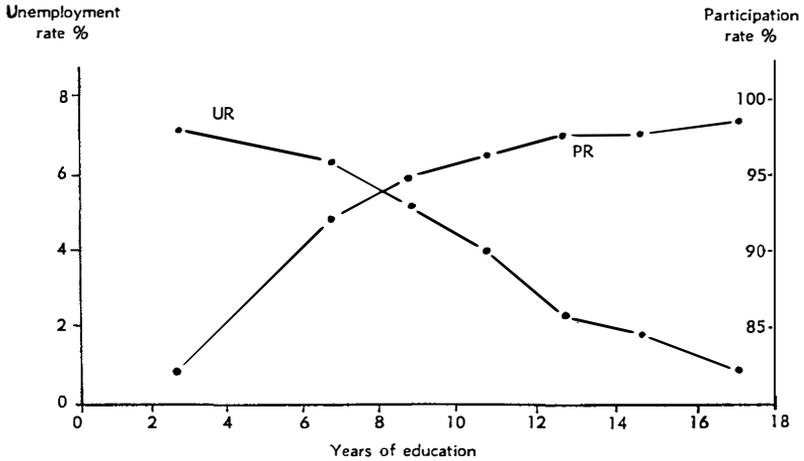
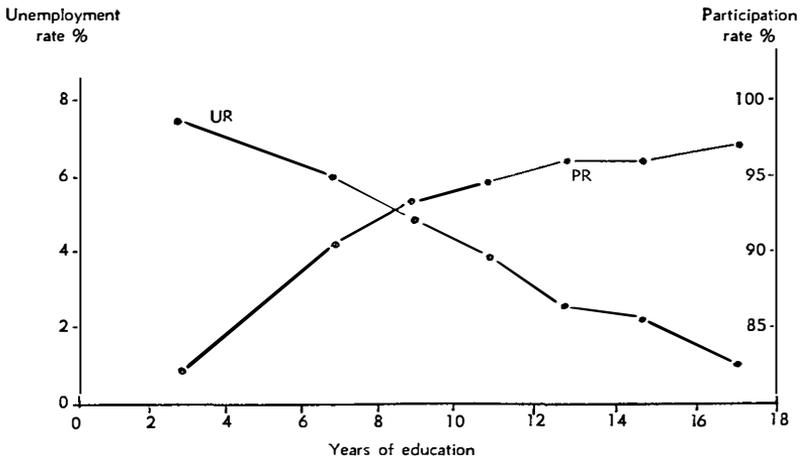
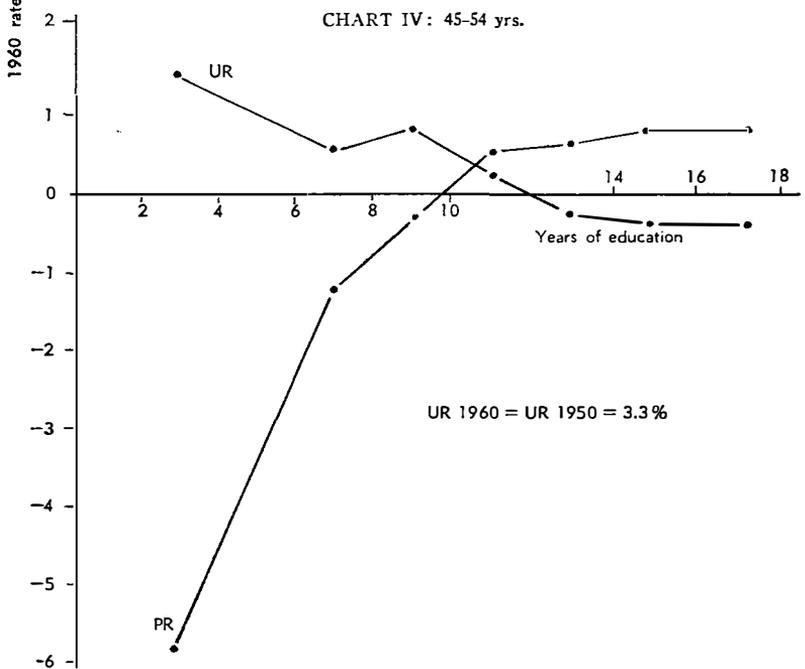
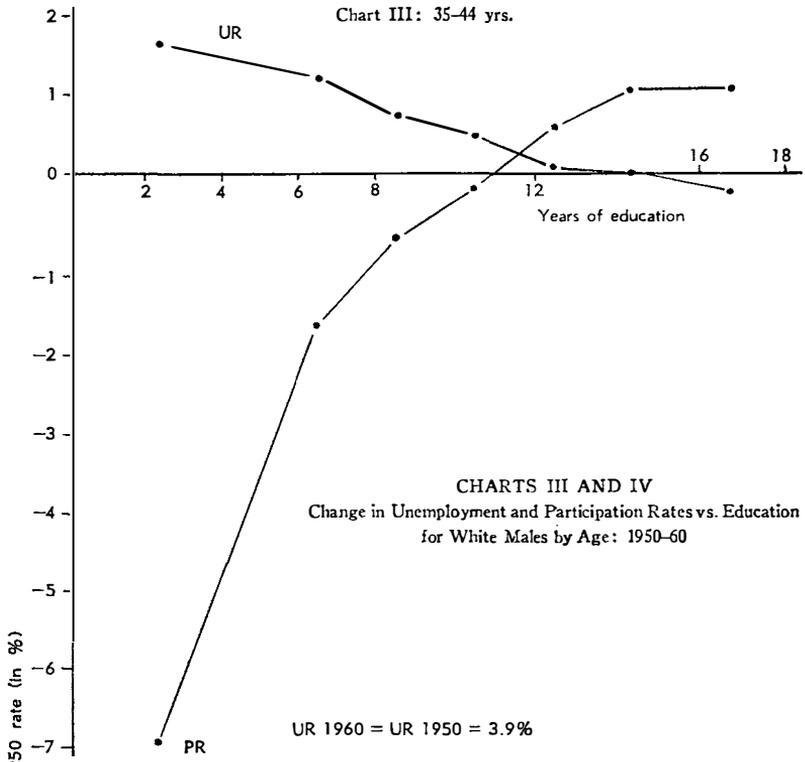


Chart II 45-54 yrs.



Source: Department of Commerce (Reference 15)



Source: Department of Commerce (Ref. 15) 1950 Unadjusted for 1957 Definitions

unemployment, it is necessary to increase both the 1950 and the 1960 levels of unemployment. The algebraic relationship between labor force participation and unemployment rates is of interest here. In 1950, as the rate of unemployment is increased, the rate of labor force participation is also increased. If part of the decrease in participation rates between 1950 and 1960 is attributed to the poor employment opportunities for those with low levels of educational attainment, then the effect of increasing unemployment rates in 1960 would be to increase labor force participation rates also. If total difficulty is considered as the sum of relative differences in labor force participation and unemployment rates, then it appears possible to consider Charts III and IV as approximations of what has happened in relative structural difficulty at two periods of roughly equivalent demand for labor.

THE PROBLEMS OF YOUTH

The methodology used for extending the scope of tests for structural difficulty may be used to study the special problems of youth. Detailed statistics of labor force participation rates and part time employment rates for economic reasons by educational attainment are not available for early parts of the postwar period. It is therefore not possible to make comparisons over time, but it is possible to observe the magnitude of these factors relative to the reported unemployment rate for the years 1962 and 1963.

Table I presents the differences between male high school graduates and dropouts for rates of labor force participation, unemployment and part-time employment for economic reasons. In order to evaluate the full difference that exists between high school graduates and dropouts, it would be necessary to sum in some way the differences in all three categories of possible disadvantages.

The statistics in this table indicate that the rate of unemployment is but a partial test of structural difficulty. The real magnitude of the cost of not graduating from high school can be seen to be much greater than the difference between rates of unemployment. It is useful to observe again the weaknesses of the use of a residual such as unemployment. If the difference in labor force participation rates of about 4 percent is added to the rate of unemployment of high school dropouts, the difference between the rates of unemployment between graduates and dropouts increases from 40 percent to 74 percent. The further addition of involuntary part-time employment for economic

TABLE 1

Employment Status of High School Male Graduates not Enrolled in College and Male High School Dropouts, October 1963

	(Population 16-21 years of age)	
	Graduates	Dropouts
Labor Force Participation Rate	94.1	90.5
Unemployment Rate	10.4	14.5
Part-Time Employment for Economic Reasons as a Percent of Total at Work in October 1963	5.5	16.4

Note: The rate of part-time employment for economic reasons is for high school dropouts who attended school some time in 1962.

Source: Vera C. Perrella, "Employment of High School Graduates and Dropouts in 1963," *Special Labor Force Report*, No. 41. U.S. Department of Labor, Bureau of Labor Statistics, 1964, pp. 526 and A-9.

reasons makes it appear that the real differential is not 40 percent, but something about 100 percent greater difficulty for high school dropouts.

SUMMARY OF EMPIRICAL FINDINGS

Members of the population with low levels of educational attainment were found to have more difficulty in obtaining employment in 1960 than in 1950. Greater difficulty was measured in terms of both relative labor force participation and unemployment rates. The two periods were ones of relatively equal unemployment and the classes chosen for comparison were white males of prime working ages. This finding is supported by the work of Clarence Long,⁸ but our conclusions are different. Clarence Long was correct in demonstrating that it was more difficult for members of the population to secure employment in 1959 than in 1950 (the two years used by Dr. Long) even though these two years had equal levels of total unemployment. But this finding that corroborates the finding of this paper that structural difficulty of the poorly educated had increased between 1950 and 1960 (question two) does not negate the conclusions of Gordon⁹ that structural unemployment had not worsened. The decision of structural unemploy-

⁸ Long, *op. cit.*, pp. 347-350, 376-383. Long's testimony benefited from his very careful study, *The Labor Force Under Changing Income and Employment*, National Bureau of Economic Research (Princeton: Princeton University Press, 1958). In this work he concluded that the "additional worker" theory was incorrect and that the net effect of a reduction in the demand for labor was a reduction in the labor force from withdrawal of the discouraged.

⁹ Gordon, *op. cit.*, p. 52.

ment, by definition, does not consider the rate of labor force participation. The reduced proportion of the unemployed who were poorly educated to the total number of the unemployed permits the conclusion to public policy question one that there has been no increase in structural unemployment.

The methodology used to answer question two was extended to examine the position of youth. It was suggested that part-time employment for economic reasons be included as a test of structural difficulty, and the combination of all three tests was used in an analysis of the difficulties of youth. The use of all three tests raised the relative disadvantage in 1963 of high school dropouts compared with high school graduates from 40 percent as measured by the rate of unemployment to a disadvantage estimated at over 100 percent.

THE RETURN TO 4 PERCENT UNEMPLOYMENT

The third public policy question relating to structural difficulties in the labor force is whether it would be more difficult to return to a 4 percent unemployment level in the latter part of the postwar period than it was in earlier periods. The first public policy question of whether structural difficulties were the cause of the higher rate of unemployment since 1957 was answered in the negative. The second public policy question of whether it was more difficult for members of the population with low educational attainment to secure employment was answered in the affirmative. It has been observed that these seemingly contradictory answers are, in fact, not in conflict with each other.

In order to answer the third question, assumptions would have to be made about the rate of return to the labor force of members of the population with low levels of educational attainment. To the extent that the median level of education increases each year, then the longer the lapse between unsatisfactory employment conditions and 4 percent unemployment, the smaller will be the proportion of the poorly trained.

The recent research findings of Tella,¹⁰ Bowen and Finegan,¹¹

¹⁰ Tella, A., "The Relation of Labor Force To Employment," *Industrial and Labor Relations Review*, Vol. 17, No. 3. (April 1964) pp. 454-469.

_____. "Labor Force Sensitivity to Employment by Age, Sex," *Industrial Relations*, Vol. 4, No. 2 (February 1965) pp. 67-83.

¹¹ Bowen, W. G. and Finegan, T. A., "Labor Force Participation and Unemployment" in Ross, A. M., Editor, *Employment Policy and the Labor Market* (Berkeley, University of California Press, 1965), pp. 115-161.

Strand and Dernberg,¹² indicate that the level of labor force participation is affected by the rate of economic activity. Cooper and Johnston¹³ have estimated that a decline of 100,000 in the unemployment level will result in a rise of about 160,000 in employment or an increase of 60,000 in the labor force. It can therefore be concluded that the return to the labor force of the poorly qualified who were seen to drop out of (or never enter) the labor force since 1950 will create a problem of greater magnitude than was the case during earlier periods of high unemployment such as 1949, 1950, or 1954. As the total rate of unemployment decreases, the proportion of the unemployed made up of the marginal workers entering the labor force will increase. In addition, a larger increase in aggregate demand will be needed in the latter part of the postwar period to reduce a given level of unemployment because of the increase in the labor force resulting from increased demand. It does not seem possible to answer question three because of the change in a number of variables during the postwar period. The greater difficulty of members of the population with low levels of education is but one negative factor in this question. A second negative factor is the increase in teenage employment. The greater competition between materials analyzed in the CEA report on the steel industry;¹⁴ the increased intensity of foreign competition and the public awareness of inflation fostered by the use of the wage-productivity guidelines are all new and favorable factors. The structurally directed programs such as the Manpower Development and Training Act of 1962 are another positive factor that will increase in importance over time. With the absence of historical experience to test for the path back to a 4 percent level of unemployment, it seems prudent to be cautious about this question and state that it cannot be answered definitely from the available statistical evidence. As the total rate of unemployment approaches 4 percent, the various public policy solutions that will be suggested as far as the use of aggregate demand is concerned must, therefore, to some degree be based upon the relative willingness to accept the risk of inflation. It is useful to separate questions that can

¹² Strand, D. and Dernburg, T., "Cyclical Variation in Civilian Labor Force Participation," *Review of Economics and Statistics*, (November 1964), pp. 378-91.

¹³ Cooper, S. and Johnston, D. F., "Labor Force Projections for 1970-1980," *Special Labor Force Report No. 49*, U.S. Department of Labor, Bureau of Labor Statistics, 1965, p. 140.

¹⁴ The Council of Economic Advisors, "Report to the President on Steel Prices," (mimeo., April 1965).

be answered with some degree of certainty through the use of statistical analysis such as questions one and two from question three which must be answered with individual judgment and values.

CONCLUSION

The significance of the findings presented here is that research into structural difficulty should be extended beyond the rate of unemployment. The usefulness of precise specification of the public policy issues involved in economic analysis is also demonstrated. The fact that it has been found that there has not been an increase in structural unemployment in the total economy does not mean that there has been no increase in structural difficulty for members of the population with low levels of educational attainment. The debate over whether structural unemployment was worsened was based, in part, on a failure to define the questions clearly. Given the set of questions used in this paper, it may be concluded that structural unemployment has not worsened since 1957. Structural difficulty for those with low educational attainment has become worse during the postwar period—even when years of equal levels of unemployment are used for comparison. This leaves the question as to whether it will be as easy to return to a 4 percent level of unemployment somewhat in doubt. It is now a long time since 1960 when the debate over whether structural unemployment had worsened began to become more intense. The longer it takes to return to a 4 percent level, the greater will be the correction in structural factors (such as increased education). The initial debate over whether increased aggregate demand could return the economy to a 4 percent unemployment level quickly and without a surge of inflation will probably never be clearly resolved. In the analysis to question three, it was observed that the rate of unemployment and structural problems in the labor force are but one factor in the determination of the rate of inflation. Public policy should take into account all of the relevant forces, and the structural problems—inflation nexus is clearly a too limited view of the wage-price determinants.

The division of the debate over structural unemployment into manageable components leaves the advocates of both sides with some comfort. The major question for the economy has been answered in favor of increased demand. The smoke from the plight of the dwindling proportion of the poorly educated that for some time clouded this first issue is found to be caused by real fire. This clarification of the issues

in the debate over structural unemployment should contribute to the development of public policies designed to bring the utilization of labor in the United States more closely up to the full potential existing in the population.

HARD-CORE UNEMPLOYMENT IN DETROIT: CAUSES AND REMEDIES*

HOWARD M. WACHTEL

The University of Michigan—Wayne State University

Reflecting on the depression of the 1930's, Alvin Hansen, the distinguished American economist, observed: "This is the essence of secular stagnation—sick recoveries which die in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable core of unemployment."¹ Although our contemporary economic situation is not equivalent to that of 1938, when Hansen made this observation, there is still much to be learned from an analysis of that catastrophe. The economy of the 1960's has also been characterized by "a hard and seemingly immovable core of unemployment" formed by an accumulation of the residual unemployed who never found jobs following the recessions of the late 1950's and early 1960's.

A brief summary of the recent history of unemployment (especially in Detroit) could go as follows: three to five years elapsed before the unemployment problems generated by the 1958 recession were seriously tackled. Although many workers who were displaced in that recession found jobs again, others have been substantially insulated from recent economic expansion and constitute a group which economists and social analysts have termed "the hard-core unemployed."²

There are several explanations for this phenomenon. First, the long-term jobless workers face a labor market which emphasizes youth, higher educational requirements, and higher skill needs. Second, the profound social-psychological impact of prolonged unemployment may seriously distort their motivations and values. Finally, they may be

* This paper represents a summary of more extensive research being conducted on the causes of hard-core unemployment in Detroit by the Institute of Labor and Industrial Relations of The University of Michigan—Wayne State University in cooperation with the Michigan Employment Security Commission. The author would like to express his profound debt to Dr. Louis A. Ferman for his pertinent insights and general encouragement throughout the investigation and thanks to Joyce L. Kornbluh for her editorial assistance.

¹ Alvin Hansen, "Economic Progress and Declining Population Growth," in *Readings in Business Cycle Theory*, (Homewood, Illinois: Richard D. Irwin, Inc., 1951), p. 370.

² The Michigan Employment Security Commission (MESC) adopted as an operational definition of hard-core unemployed 26 weeks or more of joblessness. For a description of the Commission's work, see: Michigan Employment Security Commission, *Research Report No. 1; Detroit Area Manpower Development Pilot Project*, 1963.

concentrated in certain geographically depressed areas or in depressed urban sections insulated from overall economic stimulation.

QUESTIONS TO BE EXPLORED

What is the relative importance of personal characteristics, background status, and labor market attributes in explaining the unemployment experience of the hard-core unemployed?³ To answer this question a relatively new computer procedure—multiple classification analysis—was applied to a comprehensive set of data collected in 1962 from 2114 of the Detroit hard-core unemployed.⁴ On the basis of skill level, education and age, the sample group from which the data were collected (2114 individuals) represents an even more disadvantaged (or “more hard-core”) class than the total hard-core population of Detroit. Apparently, because the collection of data was part of a large retraining effort, a relatively more “desperate” individual responded to the MESC counseling program from which these data were collected in the hope of gaining access to retraining.

In the succeeding sections we will first look at the characteristics of the Detroit hard-core unemployed, then examine the analytical results of our investigation, and finally pursue certain policy questions relating to the problem of hard-core unemployment.

PROFILE OF HARD-CORE UNEMPLOYMENT IN DETROIT⁵

Migratory Patterns

The most striking feature about the Detroit hard-core unemployed is that it is typically *not* an indigenous population. More than half of all the hard-core (54%) were born in the south; 80% of the Negroes in the sample were born in that region. Most of the Southern-born had migrated to Detroit before 1950 when the war-induced prosperity and post-war boom in private automobile consumption made Detroit (and many other northern industrial cities) an economic sanctuary for the unskilled, poorly educated Southern whites and Negroes. Nearly three-fourths of all the Southern Negro migrants

³ Personal attributes include age, sex and race; background statuses—education and region of education; and labor market attributes—occupation, industrial attachment, number of employment aids.

⁴ These data were collected by the MESC and made available to the Institute of Labor and Industrial Relations.

⁵ A more extensive report on this study—*The Correlates of Hard-Core Unemployment: A Case Study of Detroit*—can be obtained from the Institute of Labor and Industrial Relations of The University of Michigan—Wayne State University, Ann Arbor, Michigan (forthcoming).

(and 55% of all the hard-core in the sample) came to Detroit before 1950.

This pattern of migration seems to be closely associated with economic conditions. Population expert David Goldberg found that the rate of in-migration to Michigan was heavy between 1910-1930; fell off between 1930-1940, and picked up again from 1940-1955.⁶ He also found that after 1955, when employment opportunities were severely restricted, the rate of in-migration was sharply curtailed. The hard-core data under analysis reveal similar patterns. Only 7% of all the hard-core came to Detroit during the 1956-1962 period of restricted employment opportunities. Moreover, this pattern does not seem to be peculiar to Detroit and Michigan. Similar conclusions were found in the data collected by the Bureau of Labor Statistics on migration patterns to the 36 largest cities.⁷

Personal Characteristics (Sex, Race and Age)

The hard-core population of Detroit is composed of a disproportionate number of Negro males relative to the total working population. Fifty-nine percent of all the hard-core in the sample are Negroes; eighty percent are males and twenty percent are females. Among the Negroes, relatively more hard-core unemployment is concentrated in the prime wage-earning years. Approximately 78% of the Negro hard-core unemployed population was age 25 to 54; of the whites, 65% are in that age group. In short, more hard-core unemployment among the whites tends to be concentrated among the very young or very old in contrast to hard-core unemployment among the Negroes.

Background Statuses (Education and Region of Education)

The educational deficiencies of the long-term unemployed have been well documented, and the Detroit case offers no contradictory conclusions. Nearly half of all the respondents in the sample had no high school education at all. Another dimension of the educational problem, the region in which an individual received his elementary education, is frequently overlooked as a contributing factor to hard-core unemployment. Our study suggests that regional differences in

⁶ David Goldberg, "A Demographic Analysis of Michigan, 1960-1980," in William Haber, W. Allen Spivey, and Martin R. Warshaw (eds.), *Michigan in the 1970's: An Economic Forecast* (Ann Arbor: Bureau of Business Research, Graduate School of Business Administration, 1965), p. 120.

⁷ United States Department of Labor, Bureau of Labor Statistics, *Income, Education, and Unemployment in Neighborhoods* (Washington, D. C., 1963).

early schooling can affect the individual's success or failure in the labor market. Not only is the problem one of educational deficiency in terms of years, it is also a qualitative one emanating from an inferior educational system with inadequate educational opportunities. To illustrate this point, 78% of the hard-core that received their elementary education in Detroit went on to have some high school training. On the other hand, only 37% of the hard-core who received their early education in the South have some high school education. This regional variance in educational opportunities is valid for Negroes taken as a special group. Only 34% of the Southern educated Negroes in our study attended high school; however, among the Detroit-educated Negroes, 82% have attended high school.

Labor Market Attributes (Occupational and Industrial Attachment, Number of Employment Aids)

The dominance of the auto industry in Detroit produces a distinct set of occupational and industrial attachment characteristics for the hard-core unemployed. Among the Negro males there is a heavier concentration in the unskilled or semi-skilled industrial occupations. Seventy percent of the Negro males in the sample were concentrated in those industrial occupations in contrast to fifty-two percent of the whites. The dominance of the auto industry is reflected by the fact that over one-third of the hard-core unemployed held jobs in that industry before the 1958 recession.

It is frequently suggested that the hard-core unemployed are totally incapable of holding a job over a sustained period of time, usually, because they lack proper motivation and attitude. However, the data on hard-core unemployment in this study contradict this premise. *Forty percent* of the sample had been employed in their last job for *more than five years*. Nearly *one-third* of the respondents in the sample held a job at some time for *at least ten years*. This evidence suggests that it is not lack of motivation or responsibility which inhibits the hard-core from becoming re-integrated into the economy, but it is certain structural changes in the economy itself which make these people economically redundant.

Summary: A Profile of Hard-Core Unemployment

What emerges from this brief portrait of the hard-core unemployed is a set of cumulative factors which add up to a stark pattern of economic distress among the hard-core unemployed. Typically, a

member of the hard-core unemployed was born in the South, had less than a high school education, migrated to Detroit during the war boom of the 1940's, worked in a semi-skilled or unskilled occupation in the auto industry until the decline in automobile demand in the late 1950's resulted in his lay-off and long periods of unemployment during the years 1956-1962.

It is not startling to find that more than one-half of all the respondents in the sample were unemployed for at least two of the six years from 1956-1962.

THE STRUCTURE OF HARD-CORE UNEMPLOYMENT IN DETROIT

What were the causes of the prolonged unemployment of the hard-jobless in Detroit?

As noted earlier, this study used a statistical procedure, multiple classification analysis (MCA), which replicates the standard multiple regression analysis on a series of non-numerical social research variables. Personal characteristics, background statuses and labor market attributes may all be associated with length of unemployment. The MCA analysis enabled us to rank the explanatory variables in terms of their relative contribution to the length of unemployment. The results are presented in Table 1.⁸ The labor market attributes—industrial attachment and the number of employment aids⁹—emerge as a more important set of explanatory factors as measured by the relative size of the beta coefficients. Other classes of explanatory variables—personal characteristics and background statuses—have substantially less explanatory power. Employment aids and industrial attachment are the most important explanatory variables, followed by education and age.

This pattern consistently emerges from many other MCA tables which have been constructed using different measures of unemployment experience and different combinations of explanatory variables. On the other hand, it was found that certain other classes of variables

⁸ A few words about the meaning of these statistics are in order. The beta coefficient is an expression of the influence that a particular explanatory variable has on the characteristic variable holding the impact of all other variables fixed. This observed association could, however, be the result of a systematic influence which the explanatory variable exerts or it could have occurred by chance as a result of the coincidental fluctuations of the two variables. To test for this, an F test is used and the results are summarized by a probability statistic.

⁹ A score was assigned to each one of the respondents, depending on the number of employment aids which each one possessed—i.e., a truck, tools, car, occupational license, or journeyman's card.

TABLE I
The Structure of Unemployment as of Interview Date: All Hard-Core

Explanatory Characteristics	Beta Coefficient ^a	Probability
Number of Employment Aids ^b	.247	.01
Industrial Attachment	.238	.01
Education	.162	.01
Age	.141	.01
Region of High School	.094	.01
Race	.060	.01
Occupation	.058	NS ^c
Sex	.009	NS ^c

^aR² = .18

^b See footnote 9.

^c Not significant at either the .01 or .05 probability level

were not statistically significant. For example, although several measures of personal attitudes and motivations were introduced into the analysis, rarely did they evidence any relationship to length of unemployment. In short, after a careful statistical examination of all possible relevant variables, it was found that labor market attributes inevitably dominate the pattern of labor market behavior of the hard-core unemployed.

Another element in the statistical procedure is the assignment of an unemployment experience "score" to each subclass of each explanatory variable.¹⁰ It was found that a typical respondent who had been attached to a service or trade industry would have been unemployed approximately six–twelve months in contrast to a typical jobless auto worker who would have had from one to two years of unemployment. These "scores" represent the *net effect* of each attribute on unemployment experience—for example, the impact of a particular industrial attachment after the effect of age or education on industrial attachment has been removed. In short, they reveal the typical pattern of unemployment in a subclass, holding all other variables fixed. Attachment to a cyclically volatile industry (the auto industry) places the worker in a more precarious position than attachment to certain other industries—for example, service or trade. The degree of insecurity is evident from the unemployment "scores" which we have been able to assign.

Coupled with industrial attachment are other characteristics which contribute to an explanation of unemployment. In particular, the lack of employment aids predisposes an individual to experience prolonged periods of unemployment. For example, someone with no employment

¹⁰ In many ways, this is analogous to a multiple regression coefficient.

aids would typically have experienced one–two years of unemployment, while an individual with two–five aids would have been jobless for only six months.

To summarize, the hard-core unemployed are plagued by a series of negative employability characteristics which ultimately lead to severe economic and personal hardship. Any policy considerations, however, must also be directed at the economic environment in which the hard-core unemployed reside. Our study suggests that long-term joblessness is a result of both an attachment to cyclically sensitive industries (the economic environment) and the possession of negative employment attributes.

NOTES ON POLICY

The recent concern with poverty in our society is of course healthy and long overdue. Coincident with our concern about poverty has been an increased interest in specialized programs for the hard-core unemployed, even though unemployment is only one cause (and perhaps a minor one) of poverty. The major thrust of the poverty program and recent federal education legislation has been on breaking the generational link of poverty and providing services for the very old. As important as these measures are as beginnings in the “war on poverty,” they should not be considered a part of a policy to alleviate long-term unemployment which, as noted earlier, is principally concentrated in the 25–54 age group.

The principal attack on hard-core unemployment consists of the retraining programs of the Department of Labor, the regional development programs of the Department of Commerce, urban public works programs, and the attempts to make the State Employment Services more operational in job placement activities. These programs are extremely useful and our suggestion of alternatives should not be construed as a total rejection of these efforts. Our concern is with *adding* to the range of social programs in order to intensify the attack on hard-core unemployment. Since these programs have been evaluated from many different perspectives, we need not duplicate much of this very excellent evaluative work.

In the past, northern industrial centers have served as a safety valve for the more disadvantaged from other sections of the country. However, a serious question should be raised about contemporary and future migratory patterns. There is a shift occurring in the structure

of the economy in many industrial areas—namely, a movement from industrial production to service activities which have little need for as large an unskilled labor force. In addition the change in the nature of the industrial production process itself compounds the problem. No longer are unskilled or even semi-skilled workers needed in such substantial numbers.¹¹ In the face of these adjustments, will the northern industrial centers continue to serve as an economic sanctuary for the economically disadvantaged members of American society, or has this outlet been closed by structural changes in the economy?

What are the premises on which some of these programs are based—particularly the retraining and urban public works programs? Both programs have suffered from the success criteria used to measure performance. In the early years of manpower retraining, the success criteria of job placement established an incentive which had the effect of overlooking the hard-core unemployed—the jobless whose probability of re-employment even after retraining was low in the current labor markets.

A set of efficiency criteria consistent with a tight theoretical model of a market economy has been consistently superimposed on the public works projects of this country. The government seeks the lowest bid on a construction contract which may often be submitted by a firm with perhaps automated equipment, and/or a very highly skilled labor force under the control of local craft unions. In many instances, the success criteria of both the retraining and public works programs have largely excluded the hard-core from participation.

What policy conclusions emerge from this discussion of current economic programs which are related to long-term unemployment? Public services need to be developed, but from a radically different orientation. First, instead of imposing a set of *efficiency criteria*, let us impose the criteria of *human welfare*. Within the myriad public works laws, a provision could be included which specifically states that a certain proportion of the labor used in the project must come from the ranks of hard-core unemployed. The purpose of this is simple—to insure that the “trickle” meets the needs of the unemployed poor.

¹¹ These problems are analyzed in: Louis A. Ferman, “The Social Structure of the Michigan Labor Market,” in William Haber, W. Allen Spivey, and Martin R. Warshaw (eds.), *Michigan in the 1970's: An Economic Forecast* (Ann Arbor: Bureau of Business Research, Graduate School of Business Administration, 1965) pp. 241–292.

The war experiences of the hard-core unemployed lend some support to this type of program. As indicated earlier, many of the people in our sample migrated to Detroit during the war years and held jobs for a substantial length of time (ten years or more). However, during the war, rigid efficiency criteria were relaxed—instead, cost plus government contracts enabled private industry to hire people for public production at costs which they could not sustain in private markets. In the present tight labor market for certain industrial labor skills, it may be useful to experiment with direct training subsidies for industry. In effect, a program such as this replicates the successful labor policy during the war. Hence, in order to re-integrate the hard-core into a peace-time economy, we must seek a mechanism which once again relaxes the rigid efficiency criteria imposed by the private economy and the public economy in relation to public works activity.

Second, the public works projects should be designed to reinvigorate the environment of the hard-core unemployed. We should cease allocating a disproportionate part of our social resources, for example, to highways and redirect our efforts to building schools in the slums, tearing down and replacing slum housing, and building urban parks and recreation facilities. In the course of this activity, training and retraining would be constantly taking place within a meaningful social context. The training would be taken out of the artificial classroom situation and placed where the unemployed understand training—on the job.

How can the administration of the retraining programs and the public works projects be sensitized to the needs of the urban unemployed? I would suggest that a political and administrative structure should be considered, similar to the philosophy of the Economic Opportunity Act. All of the difficulties inherent in that program should not mask the substantive contribution which it has made toward involving the poor and the urban unemployed in the public decisions which affect their lives. Participation by the hard-core unemployed in the formation and administration of social programs can breed a commitment to their success.

From this investigation into the problems of hard-core unemployment, we can conclude that social and economic integration of the hard-core unemployed is not impossible. However, to accomplish this we must engage in a fundamental re-thinking of present programs and even consider experimental, and at times radical, approaches to the solution of hard-core unemployment.

DISCUSSION

LOUIS LEVINE

U.S. Employment Service

In many ways I regard this session of the IRRA devoted to contributed papers as one of the most important parts of its annual program. It provides an opportunity for young people to take the initiative and bring to the attention of "old hands" the findings of their own research which might not otherwise receive attention.

In this instance we have three papers which on the surface might seem to be unrelated. One deals with the subject of the Impact of Mass Layoffs, the other with The Use of Labor Force Participation and Unemployment Rates as a Test for Structural Difficulties and the remaining one with Hard-core Unemployment in Detroit: Causes and Remedies. If, however, one gives any thought to the matter it becomes apparent that these papers share in common a basic job market consideration. Each of these papers starts from the premise that the understanding of labor force characteristics and behaviour as well as the interplay of forces in the job markets of this country cannot be meaningful in gross aggregative terms. Instead, it is necessary to focus attention on the component elements that make up the term "labor force" or "job market."

It is not my purpose here to enter into a long discourse on the pros and cons of the structural vs. the aggregative demand school of labor economists. Each obviously has its merits. The fact remains, however, that too often the labor force economist and statistician seeks to explain job market experience by seeking out a central tendency or finding order when it does not exist. As a consequence homogeneity rather than heterogeneity is stressed. Those who are sophisticated in labor market behaviour and the experience of the work force know that the differences in the characteristics of labor force participation and unemployment rates or the dissimilarities among the hard-core unemployed or the variations in the experience of those affected by mass layoffs are critical to the development of appropriate programs capable of dealing with urgent problem situations.

It is wholly an accident that two of the papers are based on data made available to the authors from a close working relationship with State employment security agencies. Dr. Smith's paper on "The Impact of Mass Layoffs" is an analysis of the information which was developed

within the public employment service system as a result of the introduction of a special report on layoffs of 100 or more workers. The objective of this operating report is in the first instance to stimulate the introduction of an advance notice system submitting information on anticipated mass layoffs. The report would provide the employment office an opportunity to consult with employers in those establishments where such layoffs are anticipated so as to minimize the adverse impact from large-scale employment displacement.

The data developed through this report indicates that there is a greater degree of cooperation on the part of employing establishments and willingness to provide advance information on anticipated mass layoffs than might have been expected. In almost 70 percent of the cases such information was provided to the local employment offices and verified by subsequent experience. It is also significant to note that most of the mass layoffs were not attributable to technological changes or introduction of new equipment and production techniques. Instead, the mass displacements are largely attributable to changes occurring in defense, space and related industrial activities. The role of government in bringing about these sharp fluctuations in employment cannot be ignored.

Analysis of these data also discloses significant geographical variations in the occurrence of mass layoffs—closely correlated to high concentrations of defense and space industries. The analysis of mass layoffs by broad occupational groups indicates that some three quarters of all the workers affected were in blue-collar occupations. Significantly many of these workers are in occupations which in recent months have become increasingly identified as shortage occupations. We find in Dr. Smith's paper an excellent example of useful manpower analysis focused on a single phenomenon—mass layoffs—which dissects the experience by recognizing the significantly different impacts for component elements.

Despite the contributions made by Dr. Smith's paper, one might wish that it were less a statistical analysis based exclusively on quantitative data derived from a mass reporting system. A more complete understanding of the impact of mass layoffs requires such information from employing establishments as the degree of unionization and the availability of severance pay. The analysis should also take account of the characteristics of the local job markets within which the mass displacements take place. It is not enough, for example, to analyze

the impact of mass layoffs in two establishments of equal size without taking account of the character of the industry, alternative employment opportunities, occupational composition of the firm and, indeed, the personal and other characteristics of the work force in the employing establishment. From the standpoint of the local employment office, the impact of a mass layoff is finally experienced in terms of the single most important component, namely the human being in search of employment assistance and job market services. Perhaps it is too much to expect that manpower analysis, based on a large volume of quantitative data, should be carried to such extreme detail.

I found Professor Gruber's paper on "The Use of Labor Force Participation and Unemployment Rates as a Test for Structural Difficulties" an interesting exercise in statistical techniques. I am not convinced that it is necessary to go to such great lengths to demonstrate that unemployment and labor force participation rates are influenced by educational levels of attainment. In the first instance, I question seriously whether the comparison of the two time periods 1950 and 1960 can be valid merely because the unemployment rate for each of these years was approximately the same. This emphasis on the unemployment rate—a single aggregate—is likely to be misleading. To fail to take account of the experience between these years is even more serious. By 1960, this country had experienced some four post-war recessions with rising unemployment rates and volumes throughout the decade. More significant is the fact that labor force growth, particularly among young people, was far greater by 1960 than in 1950. This therefore would have a considerable bearing on levels of education attained and the impact on unemployment and labor force participation rates. I am inclined to disagree with a comparative analysis of unemployment and participation rates among whites with the unemployment and participation rates of the total work force since whites constitute almost 90 percent of the total. It does not seem to me that an analysis of the white sub-group can be meaningful. Despite my criticism of excessive reliance on statistical technique, Professor Gruber nevertheless makes an important contribution to our understanding of unemployment rates and labor force participation when he distinguishes this experience by age, level of education, and racial characteristics. Once again his paper demonstrates that an understanding of labor force experience must rely heavily on a disaggregative approach.

I was especially interested in Mr. Wachtel's paper on hard-core

unemployment in Detroit. When this paper first came to my attention, I expected to find an analysis which would throw additional light on the study, initiated by the Michigan Employment Security Commission, to uncover the characteristics of the long-term unemployed so as to develop a series of remedial actions for dealing with their problem. About a third of the paper, however, was devoted to broad-gauge manpower policy, bearing little or no relationship to the specific findings or the data available from a study of the characteristics of the hard-core unemployed in Detroit. While Mr. Wachtel's broad-gauge manpower policy recommendations may have an appropriate place in another forum, they did not bear any relationship to the data derived from the Detroit study.

Although Mr. Wachtel's paper has within it the elements of a structuralist's approach to an understanding of an important segment of our unemployed, I am inclined to be skeptical of his objective to discover a single characteristic for determining the *cause* of long-term unemployment. The technique of arraying characteristics of a sample of the long-term or hard-core unemployed and fixing some arbitrary value to the significance of each of these characteristics can be misleading. Despite this questionable approach in which he seeks to find a simple coefficient, Mr. Wachtel, nevertheless, fixes attention on a very important consideration. Up to the present time labor force economists have been able to define long-term unemployment only through the lapse of time. Thus if a person were unemployed 15 consecutive weeks or 26 consecutive weeks he would be considered either long-term or hard-core unemployed. This paper raises a question whether it is possible to identify—in advance—individuals whose personal and economic characteristics are such that we can with some certainty predict their labor market behaviour. To the extent that our knowledge of the job market permits such identification, appropriate remedial actions can be introduced within the existing institutional framework. Clearly early diagnosis of human resources and manpower problems is critical to the resolution of such problems. Perhaps the labor market practitioner is overly impatient in his desire to have analytical tools to make his task easier. Manpower research of the character undertaken by Mr. Wachtel is likely to result in greatly improved labor market administration.

One can derive a great deal of satisfaction from the knowledge that the research and findings in each of these contributed papers are based

on sufficiently large volumes of data and comprehensive experience to lend validity to the conclusions. This is an excellent illustration of how an individual academic researcher, despite his own limited staff and equipment resources, can undertake meaningful manpower research when appropriate working relationships are established with various public agencies concerned with the administration of human resource and manpower problems. There may be occasional instances in which highly localized individualized research based on interviews or household surveys involving a sample of 50 or 100 individuals or households may have value. In general, however, I would say such research is more significant for the contribution it makes to research techniques than to the analysis of manpower data or meaningful conclusions on which manpower policy and program development may be based.

The research in all three of the contributed papers was made possible by the collection and organization of human resource and manpower data by the U. S. Employment Service and the State employment services or by the U. S. Bureau of the Census and the U. S. Bureau of Labor Statistics. There exists large volumes of manpower information in State agencies, particularly data derived from employment service and unemployment insurance activities. Such information originally obtained for the administration of specific legislation or programs suffers, of course, from limitations which would be avoided if the data were obtained exclusively to achieve certain manpower research objectives. Nevertheless these data, despite their shortcomings attributable to administrative and statutory requirements, frequently can provide answers to important questions bearing on labor force experience and job market behaviour. Unfortunately the agencies collecting such information fail to exploit the data because their mandates are for program administration and not for research. The graduate student and college faculty member concerned with human resource and manpower problems might well look into this source of manpower data to obtain a better understanding of our manpower institutions and the structural character of our human resource problems.

I am sure I express the views of others present at this session when I indicate that we are deeply indebted to the authors of the contributed papers. They have evidenced interest in currently important manpower problems and have undertaken to bring about a better understanding of them. All of us need to encourage continuing research in this field. There can be no doubt that the number one domestic public concern

in this country is the optimum preparation, development and utilization of our human resources. The papers represent an effort to contribute to the achievement of these goals.

VIII

CONTRIBUTED PAPERS

INFORMATION, MOBILITY AND ADJUSTMENTS IN A CHANGING LABOR MARKET

George H. Hildebrand, Chairman

LABOR MARKET ADJUSTMENT AND INTERNAL TRAINING ¹

PETER B. DOERINGER AND MICHAEL J. PIORE
Harvard University

I

In the manufacturing sector the critical elements in the process of adapting the labor force to the requirements of production and maintenance jobs takes place within the plant. In analyzing this process, the plant may be conceived as a labor market unit operating under a set of administrative rules governing the pricing, allocation, and often the training of its labor force. These rules define the plant's job structure and the interfaces between this structure and the external labor force.

In most manufacturing plants, entry into the internal labor market is restricted to particular hiring jobs or "ports of entry."² The remaining jobs are filled through upgrading and promotion. This procedure creates a distinction between the workers inside the plant and the external labor force. The rules which define the internal labor market and govern its operation are derived from a variety of sources; joint negotiations between labor and management, unilateral imposition, or custom and tradition.

There are two features inherent in the nature of manufacturing work which make the external market incapable of performing many of the functions assigned to it in economic theory and help to explain the existence of the internal market and its role in training labor. These are (1) the specificity of jobs to the plant and (2) the importance of training conducted on the job in the process of production.

Job specificity does not imply that job skills are completely limited to the plants in which they are used. While a few jobs are plant-specific, the majority have approximate counterparts in other plants in the same industry. The technology and capital equipment define a

¹This paper is based upon material gathered in a series of extensive interviews during 1964 and 1965 with industrial engineers and industrial relations and operating executives in 23 manufacturing plants. This research was sponsored by the U.S. Department of Labor under the Manpower Development Training Act. While many of the employment and training mechanisms described also apply to managerial, technical, and clerical personnel, for purposes of exposition we have limited this paper to production and maintenance workers in the manufacturing sector.

²See Clark Kerr, "The Balkanization of Labor Markets" in *Labor Mobility and Economic Opportunity*, E. Wight Bakke *et. al.*, (Cambridge: Technology Press of M.I.T., 1964), pp. 92-110.

series of operating and maintenance tasks which must be performed in the process of production, and the jobs within the plant are composed of combinations of these tasks. All plants using similar equipment therefore tend to possess jobs which share common skills and tasks. However, idiosyncracies of individual pieces of equipment, the particular combination of tasks into jobs, the plant layout, managerial practices, and operating procedures all differentiate jobs so that, despite common skill elements, they become specific to each plant.

In the economics of production these differences become significant. While the work can often be performed by anyone who possesses an understanding of the mechanics of the task, and thus by anyone who performs a similar job in another plant, it cannot be performed with the requisite efficiency.³ Moreover, in a great number of manufacturing jobs, the "skill" level involves only those factors which contribute to efficiency in this sense.

To the extent that jobs are specific to the plant, the plant has no competitors for the job skills it provides, nor does it have an external source of supply. Thus, even if the worker could obtain the requisite skills outside the plant, there would be no incentive to do so because direct entry into them is unlikely.⁴

However, for many manufacturing jobs, even those completely specific to the plant, the worker has no opportunity outside to obtain the full set of skills. They can only be developed through experience on a particular job. This is especially true in manual jobs which require muscular coordination to perform a repetitive task quickly, a skill which is difficult to communicate except through demonstration and can be acquired only through practice. On-the-job training is frequently necessary, as well, for the operation and maintenance of equipment. Here the requirement of efficiency places a premium upon the ability to anticipate trouble and to diagnose its source, almost instinctively, by minor variations in operating sounds and smells. Again, such skills can be best developed through experience in particular operating situations.

Even where on-the-job training is not essential to the learning

³For example, speed and continuity of production often depend upon quick and appropriate reactions to a wide variety of production problems. The ability to react effectively is contingent upon familiarity with such plant procedures as materiel delivery and maintenance.

⁴Gary Becker has arrived at similar views regarding job specificity by a somewhat different line of reasoning. See Gary S. Becker, *Human Capital*, National Bureau of Economic Research, (New York, 1964), pp. 11-32.

process, it yields certain training economies. Much of this training by definition takes place almost automatically within the firm. Employees tend to pick up other jobs simply by being in physical proximity to them. Some higher skilled jobs utilize training received through work on lesser skilled jobs within the plant. The specialization of jobs, the short training period required to learn most of them, and the small number of trainees at any given time further encourage on-the-job, as opposed to formal classroom, training.

Additional economies derive from the fact that on-the-job training restricts itself to the narrow, specific set of skills required for job performance and includes no excess training. The period of training adjusts itself automatically to the trainee's ability. Similarly, the training program automatically keeps abreast of changes in the job itself. This is important since manufacturing jobs tend to evolve continually over time as operators discover shortcuts and often add minor jigs and fixtures to their machines.

None of this should imply that on-the-job training is costless. Its cost can seldom be observed directly, but they do appear as reduced labor productivity, wasted raw materials, damaged machines, increased machine downtime, and the diversion of supervisory personnel or job incumbents who do the training. Furthermore, both the narrowness of on-the-job training and its tendency to evolve with the job, limits the worker's opportunity to acquire broader skills which help in the handling of emergencies and in adaptation to major technological change.

Within its own confines, however, the system exhibits considerable elasticity, particularly in adapting its training procedures to changes in both the nature of the labor force and the structure of jobs this labor force is required to fill. These adaptations constitute a major channel through which compatibility between the labor force and the job structure is achieved. The changes which internal labor training procedures undergo in the process of adaptation fall into several distinct patterns.

The most prevalent is a simple change in the length of the training period without formal modifications in the process or content of training. Where it takes place on the job as part of the process of production, training has little objective meaning outside of the learning or productivity curve of each worker; the total "amount" of training is thus really defined by the sum of these curves. As the nature of the labor

force or of the jobs changes, such a total training curve will automatically shift.⁵

A second mode of adjustment involves the deliberate opening of alternative lines of promotion in response to training requirements. Such adjustments are a common response to a tightening labor market. Thus, in many plants, the rate of promotion of craft helpers, and often the number of helpers as well, is frequently determined by the availability of trained craftsmen on the outside labor market. In the auto industry such a line of promotion is formalized; a temporary skilled trades job, activated only in tight labor markets, has been created connecting the production job classifications to the maintenance promotion ladder.

This pattern is also characteristic in cases of changes in job structure. When new jobs are created by technological change, the process of skill acquisition is important in determining where in the existing upgrading structure it should be placed. Similarly, an expansion of the number of high skill jobs occasionally dictates the rearrangement of promotion ladders to increase the supplies of related skills from below.

A third adjustment pattern involves the institution of formal training programs. In the plants we visited, the existence of such programs was often explained by conditions in the outside labor market. We also encountered a variety of these programs for jobs created by changes in technology. Many of these training programs, particularly for operators, were considered temporary. They were viewed as the initial part of a process of building new systems of on-the-job training to overcome technical discontinuities in the process of on-the-job transfers of skills from one generation of workers to another.⁶

Similarly, the introduction of new technologies was frequently accompanied by formal training programs to upgrade skills of both production and maintenance employees. Here, the formal content of the curriculum was often quite sophisticated. However, the duration of the program, seldom more than two weeks, as well as comments by the

⁵ From the managerial point of view, the danger is not that these changes will fail to occur, but rather that they occur unplanned and uncontrolled, imposing a cost burden that could be avoided by less expensive means of adaptation.

⁶ For example, in two of the companies involved in plant moves, extensive formal orientation programs were planned to familiarize both new employees and transferees with procedures and equipment in the new plant. Orientation of this type had been handled by the foremen and other workers on the job at the old plant, and was expected to be handled this way again, once the transition process was completed.

plant personnel developing and teaching it, indicated that the employees were not expected to emerge fully trained. Rather, the program was designed to provide a framework, often no more than a vocabulary, around which skills could be built through on-the-job experience. Moreover, in most cases, it appeared that management expected future generations of workers to be trained on the job by the incumbent operators, once the latter had become experienced.

Actually, the most surprising aspect of formal training was how little it was used, even in plant moves and in major technological changes where one might have expected it was the only means by which the required skills could be generated. In most cases, the major part of the adjustment process took place on the job. In the plant moves we encountered, an attempt was made to get as many of the incumbent operators to move with the plant as possible, and to train new operators at the old plant. Where neither course was possible, supervisory personnel were frequently trained in the rudiments of the jobs in their departments at the old plant, and they in turn trained the new operators after the move.

Even for new technologies, the required skills seemed most frequently to be transmitted directly from the equipment designers and builders through on-the-job demonstration. When the skills were particularly complex, this training process began by having the operators and maintenance personnel participate in the installation and start-up of the new equipment and, where possible, in the building process as well. In a sense, design engineers served as the first generation of a new on-the-job work family, which then passed forward the required skills to the lesser skilled operators and technicians in a process very similar to that in which older job skills were transmitted. In fact, in one case in which the maintenance crafts had not absorbed the new skills by the time the start-up was completed, the engineers continued to maintain the equipment, using the regular maintenance employees as assistants until they could assume responsibility.

The importance of on-the-job training and the apparent ability and willingness of the firm to adapt training procedures to the changing characteristics of jobs and workers raises the question of the role of the school system in the development of job skills. The answer is, however, obscured by the role of educational attainment as a screening device. Education requirements are imposed by the firm, in part, to identify a group of workers possessing qualities such as reliability,

learning aptitude, and ambition which contribute to successful job performance but which are not necessarily acquired in school.⁷ The role of educational qualifications is further complicated by the process of internal promotion; hiring qualifications are often connected with promotion potential rather than with the requirements of the entry job.

Despite the difficulties in identifying its contribution precisely, it is clear that formal education provides a foundation of skills upon which in-plant training builds and which serves as a kind of prerequisite to its success. However, this prerequisite is clearly not absolute. It is apparent that adjustments in in-plant training frequently can compensate for its absence. Thus, to some degree, formal education and in-plant training are substitutes for each other. The specialization of jobs and the need for practice to obtain skill and efficiency place a limit on the extent to which education can be substituted for in-plant training. If there are limits in the other direction, however, they are economic rather than technological, for, in the extreme case, the school program can be reproduced within the plant.⁸

Our interviews revealed no points at which a lack of formal education in the internal labor force proved an insurmountable economic obstacle to retraining. The typical reply to questions designed to uncover such obstacles was that "somehow we always manage to produce." Several plants even had managed to overcome educational impediments by engaging in training programs to provide rudiments of general education. Two plants, for example, when forced to reduce radically formal educational standards for admission to a training program which required advanced algebra and calculus, taught the requisite skills through a 10-hour extension of the original courses.

This is not to suggest a complete separation of the school system from in-plant training programs. For example, one plant enlisted the aid of the local school system to provide literacy training for its labor force to facilitate the introduction of a new technology. Another plant developed a new source of supply for electrical maintenance skills by providing the initiative for an electronics program at the local trade

⁷ Management seems to know surprisingly little about the causal relationship between worker attributes and job performance. Almost all screening criteria are derived from the correlation with worker performance. These correlations are usually quite intuitive and unsophisticated but in some large plants are coming to be performed with the aid of computers.

⁸ This extreme case is not very helpful in defining the economic limitations of in-plant substitutions for formal education, since even when in-plant training is formalized, it bears little resemblance to that which takes place in the school.

school. This permitted the plant to discontinue its own training course. Several others indicated that they were working with local colleges and vocational schools to develop new courses dealing with their own technologies. However, in each of these cases, the initiative came from the plant. This was often reinforced by the donation of the training equipment, teachers, and sometimes students.

Training within the firm is further supplemented by the vendors of equipment. The division of training efforts between vendors and their customers varies even for the same type of equipment. For small firms and for major changes in technology, the vendor frequently performs much of the training. Our contact with vendors was not extensive, but it did appear that their training programs were not unlike those developed by the firm itself. They often provided training on the customer's premises, and, where such training was formalized, the program, despite the apparent sophistication of content, was designed primarily to provide a framework for future on-the-job training. When the training process was lengthy, the vendor occasionally lent his own personnel to the plant to serve both as on-the-job instructors and as temporary substitutes for the required workers.

II

The picture which emerges is a process of adjustment between the labor force and the job structure through training, initiated by the firm in *direct* response to skill scarcities rather than through an external market mechanism. However, this response is neither automatic nor inevitable. The role of training must be placed in the perspective of the firm's total relationship to the outside labor market.

Our interviews suggest that, within the firm, this adjustment process may be viewed analytically in terms of eight variables:

- (1) The job structure of the plant⁹
- (2) The administrative rules of the workplace
- (3) The size and characteristics of the labor force outside the firm
- (4) Recruitment procedures
- (5) Screening procedures

⁹The "job structure" includes here the distribution of work between overtime and additional straight time employees. The "administrative rules" restrict the ability to vary this distribution.

- (6) Hiring criteria ¹⁰
- (7) Training procedures
- (8) Compensation

The job structure and administrative rules describe what we have called here the internal labor market. The size and structure of the labor force available outside the firm define the external labor market. The remaining variables—recruitment, screening, training, hiring criteria, and compensation—describe the relationship between these markets. Except in rare cases, the firm has no control over the external labor market, so that this variable is essentially a parameter. As this parameter changes, the firm will accommodate itself by adjusting the variables under its control. Thus, training is only one of a set of competing modes of adjustment available to the firm adapting the external labor force to its own internal job structure. When the skills obtainable on the outside become scarce, as in a tightening labor market, for example, the firm might, as an alternative to internal training, raise its wages or increase its recruiting efforts in an attempt to attract additional skilled workers.

Each of the alternative modes of adjustment carries with it certain costs. These may be direct, as in the case of compensation, recruitment procedures, and formal training programs, or they may be reflected indirectly in decreased labor productivity, raw material wastage, machine damage, and the like, as would be the case with lowered hiring criteria and extended training times. The profit-maximizing firm will presumably select the least-cost mode of adjustment.¹¹

This adjustment process within the firm implies, for the manufacturing sector as a whole, a functional relationship between the level

¹⁰ The major distinction between screening procedures and hiring criteria is that hiring criteria reflect the underlying worker characteristics which the employer desires to measure (usually the ability to perform at a minimal level of productivity) while screening procedures reflect the methods used to measure the criteria. The latter may or may not be causally related to the former.

¹¹ For each firm the various modes of adjustment form a cost hierarchy which indicates the sequence of adjustments which the firm will follow in a progressively tightening labor market. This sequence is of interest because each of the various modes of adjustment has different consequences for the economy as a whole. The relationship is not uniform among firms. Since all modes of adjustment are composed of several variables, their relative costs will vary among firms due to differences in technology, size, geographic location, and so forth.

of unemployment and the level of prices.¹² The precise form which this takes will reflect the job structure and the structure of the labor force and will, therefore, shift as these structures change under the impact of changes in technology, in the composition of demand, and in demographic patterns. When these exogenous factors remain fixed, a declining level of unemployment will force the firm to make adjustments which will generate additional costs. These costs will, in turn, put pressure upon the level of prices. In the American economy, where both price stability and full employment constitute high-priority social goals, the underlying conflict between them inherent in this functional relationship creates a basic policy dilemma.

The relationship between unemployment and prices is a product of two sets of forces. It is, first of all, the result of the underlying incompatibility of the structure of the labor force and the structure of jobs. To this extent, the price increases reflect the real costs of reconciling the two structures, imposed by the underlying economic problem of scarcity at the prevailing level of technology. Second, the relationship is a product of the institutional environment in which the reconciliation between the labor force and the job structure takes place. This environment may raise the monetary cost above the minimum real cost required to perform the reconciliation. To the extent that this is so, policies may be developed to reduce the conflict between full employment and price stability through modifications in the institutional environment.

It is apparent that, in at least one respect, the adjustment process may react perversely to raise the monetary cost of adjustment. If all firms attempted to adjust to a tightening labor market through increases in the entering wage, a wage spiral could result which would contribute nothing to alleviating the underlying problem of skill scarcities. However, firms seemed to be acutely aware of this danger

¹² This functional relationship between the tightness of the labor market and the rate of inflation is akin to the Phillips curve. It differs from the original Phillips curve, however, in several respects. First, the inflationary pressures generated by the adjustment process are not necessarily continuous. They may lead to a simple one-shot price increase. Second, in contrast to Phillips' formulation of the problem, wage increases constitute only one of several ways through which a tightening labor market produces cost increases. Third, this relationship probably cannot be observed directly. The Phillips curve actually observed will be the product of several relationships influencing the behavior of costs. Among these, for example, are the relationship between profits and wages posited by Eckstein and Wilson (Otto Eckstein and Thomas A. Wilson, "Determination of Money Wages in the American Economy", *Quarterly Journal of Economics*, vol. LXXVI, August, 1962, pp. 379-414) and the relationship between investment and productivity.

and were reluctant to raise their wages relative to other firms in a tightening labor market. In addition, they found it difficult to vary the entry wage, which is the significant wage rate in attracting labor, without jacking up the whole wage structure. Wage increases thus appeared to be a mode of adjustment decidedly more costly and less attractive than adjustments through recruiting, screening, and training, all of which contribute to removing the underlying labor scarcity.¹³

In evaluating the institutional process, a second consideration is that the real costs of reconciling the labor force and the job structure may be absorbed outside the firm in a less inflationary manner. In an economy with substantial unemployment, it may be argued that the cost to the firm of measures which reduce unemployment exceeds the social costs of these measures. This constitutes a case for government subsidization of plant training costs. Subsidization has the additional advantage of decreasing the cost of training to the firm relative to wage increases and thus of reducing the possibility of a reaction to labor scarcities through a wage spiral.

On the other hand, subsidization of training has the disadvantage of disturbing cost relationships which are crucial to the stability of the system; in particular, the relationship between training costs and changes in the job structure. So long as the firm is forced to bear the burden of adjustment of the labor force to the job structure in evaluating innovations which change the job structure—for example, technological change—it has an incentive to include an allowance for training.¹⁴ This does not insure that all the costs of adjusting the labor force will be met before a technological change is introduced. The firm avoids some of these costs if the change reduces its labor force, thus shifting the burden of adjustment to the outside labor market and, through it, to other firms in the economy. Nevertheless, the firm is at least forced to make allowance for training the labor directly connected with the innovation. To this extent, the possibility of structural maladjustments caused by technological change, to which many analysts have attributed the current unemployment problem, is reduced.

¹³ It should be noted that all wage adjustments need not be perverse. The acquisition of skilled workers does involve, to some extent, interplant transfer of labor, although we were unable to gauge its precise contours or importance in our interviews. A certain amount of wage adjustment is critical in facilitating such transfers as the labor market tightens.

¹⁴ See Gary Becker, *Human Capital*, pp. 12–32, for a discussion of the incidence of training costs.

Distinct from the monetary aspects of the institutional environment is the question of the technical efficiency of the adjustment process within the firm; that is, does the process of adaptation within the firm actually minimize the expenditure of scarce resources devoted to it? This implies a comparison with an infinity of alternative techniques of adjustment, and thus no determinate answer is possible. The question can be broached, however, in terms of the incentives to efficiency and the obstacles to achieving it inherent within the system. The basic incentive is the firm's desire to maximize its profits; the fundamental obstacle is the rigidity of the structure of the internal labor market imposed by management inertia and union pressures. The balance ultimately struck between these two opposing tendencies clearly varies among firms. Nevertheless, the comparisons among internal labor market structures in our study suggest some tendency for the market to be structured so as to minimize training costs.

In general, internal market structures can be classified by (a) their openness to the outside labor market (the number of jobs which are filled by promotion from within relative to the number filled from outside) and, (b) the scope of ladders of promotion and layoff. While employee pressure tends to work towards protection of both employment and promotion opportunities, the rules governing in-plant movement seem often to reflect, to some degree, differences in technology and training times. Jobs with complex skills to which experience in other jobs in the plant did not contribute were generally opened to the outside. The scope of promotion and layoff districts seemed to depend on the length of training time and the degree of skill-overlap between jobs. Where skills on all jobs were similar or could be quickly acquired, ladders for both promotion and layoff were broad. Where skills were more complex and more specific, promotion ladders were narrow and tended to follow lines of natural skill progression.

A tendency toward efficiency in training was also noted in adjustment in the rules governing the internal allocation of labor to changes in the job structure. When changes in job content increase the complexity of the skills required while the jobs remain related to one another within the old ladders of progression, rules may be developed which emphasize the application of ability criteria for promotions. On upward movements, employees may also be required to hold a job for a minimum length of time before they are eligible for promotion; alternatively, promotion ladders may be narrowed. In downward move-

ment, occasioned by reductions in forces, bumping rights may be limited to the lower skilled jobs in the plant or to the jobs which the employees previously held. Similarly, the construction of narrow up-grading ladders and the requirement that employees remain on highly skilled jobs for a specific length of time before being eligible for promotion are essentially attempts to prevent redundant training and to restrict promotion opportunities to those employees who will require the least retraining.

Since any new or changed job can be related to the existing internal promotion structure through sufficient retraining, there are really no jobs which cannot be filled internally. Nevertheless, management often finds that certain changes in the job structure are incompatible with the traditional in-plant progression ladders. Jobs within this category are usually filled outside the regular lines of promotion or through new ports of entry, and special educational or aptitude requirements are often imposed.

The net effect of all these adjustments is to reduce the amount of training which the plant has to undertake.

Such changes may meet with employee resistance, and management is not always successful in making the desired adjustments. This resistance involves fundamental principles of equity which cannot be evaluated solely in terms of economic efficiency. However, even in terms of efficiency, such resistance is not necessarily pernicious. It has two distinct effects: it prevents the plant from escaping some of the burden of adjustment by replacing a part of its labor force with more qualified people, and it restricts the efficiency of adjustment within the firm. While both are repugnant to management, only the latter is clearly undesirable from the social point of view since the costs of the adjustment must be borne by society. One resolution of the conflict between labor and management in these areas has been to enhance management's freedom to obtain internal efficiency while restricting its opportunities to escape from the obligation to retrain existing employees. In cases of major job reorganizations, for example, management may purchase the freedom to allocate employees efficiently within the plant by strengthening the employment security of existing employees. This has taken the form both of guaranteed employment, as in some sugar refineries, and of the creation of employment rights in additional plants under the control of the same employer, as in meatpacking.

Where job changes take place piecemeal, management usually retains significant freedom in the design of training procedures. This freedom is implicit in the "ability" section found in many employee-assignment clauses and is evidenced by the use of elaborate testing procedures to screen the internal labor force for many new jobs. It is also implicit in management's right to design jobs, since much work within manufacturing involves separate set-up, operation, and maintenance tasks which can frequently be combined into jobs that naturally fall into the most advantageous training ladders.¹⁵

This is not to say that management always succeeds in obtaining maximum training efficiency. A number of cases can be cited in which management was unable to obtain the most desirable placement of jobs within the job structure. Our interviews did not suggest, however, that union restrictions upon training efficiency were a major concern of management. In most cases where it appeared to be so, management was really concerned about inefficiencies connected with "featherbedding."

III

Our survey does not support the contention, upon which the argument for government training is frequently based, that unemployment is structural. The firm will always try to hire the "best" labor force available. In a loose labor market, this causes unemployment to be concentrated among such groups as the poorly educated, the Negroes, the young. Nevertheless, as aggregate demand is increased, our research suggests that the internal labor market will provide the training adjustments necessary to integrate these "less qualified" employees into the job structure of the plant.

On the other hand, this process does impose additional costs upon the firm which create inflationary tendencies as the economy approaches full employment. Government training programs are one means of reducing these tendencies.

An effective government program must recognize the distinctions between general training in basic skills, general occupational training, and specific occupational training. General training in literacy and basic mathematical skills lends itself to formal classroom programs outside the

¹⁵ Job design may be used occasionally to give management additional flexibility by enabling the job to be removed from the production unit. While its freedom here is sometimes restricted through contract clauses, where the job is sufficiently ambiguous to fall under such clauses, the difference in training costs between alternative designations is probably not great.

plant. The public sector has traditionally provided training of this type. Under unusual circumstances plants do this themselves, but they are ill-suited to the task. Moreover, in contrast to government programs, these in-plant basic training programs are extremely narrow. They do not provide the broad educational base required to qualify a worker for employment elsewhere. Thus, there is a strong case for the further expansion of general literacy training provided by the 1964 MDTA amendments.

Training for occupational skills requires a different approach. For some skills, particularly the maintenance crafts and certain machine operations, jobs exist which may be filled from outside. Where this is true, out-plant programs providing these skills are feasible. However, where occupational skills are specific to a plant, government training programs must take the form of subsidies to in-plant training. The more than threefold increase between 1963 and 1964 of on-the-job trainees under MDTA indicates a move in this direction. But thus far these subsidies have been confined to occupations where training is connected with a job opening or where the training process is readily identifiable. If training programs are to be designed to reduce the inflationary pressure of training costs as well as to facilitate labor force adjustment, they should not be limited to this type of job. Training often takes place, as we have emphasized, gradually over the course of the worker's career, and the costs appear indirectly. This raises administrative problems in identifying all the costs of training, and in financing these costs over the career-life of the employee. Since a substantial part of industrial training currently takes place on the job, the government must face these problems if it is to assume a significant portion of these costs.

INTERACTIONS OF EXTERNAL AND INTERNAL LABOR MARKETS FOR ENGINEERS AND SCIENTISTS

JOHN E. PARKER*
University of Michigan

The operation of white collar labor markets has recently begun to receive some attention in labor market research. This reflects the changing composition of the labor force and the growing recognition of the need for a better understanding of important and rapidly growing occupations.

This paper reports on some aspects of the labor market for engineers and scientists in the aerospace industry.¹ The larger study included information on many dimensions of the market.² The purpose of this paper is to explore some of the principal patterns of mobility and to examine the impact of the organization as a determinant of these patterns.

The concept of mobility is expanded in this study to include intra-organizational movement of the internal market dimension.³ For our purposes the internal market is defined as consisting of the jobs within

*The author wishes to thank the Office of Economic and Manpower Studies of the National Science Foundation and the Institute of Labor and Industrial Relations at the University of Michigan for their financial support and helpful suggestions. In addition I am indebted to Professor Gerald G. Somers for his encouragement and assistance at all times and to the Social Systems Research Institute and the Industrial Relations Research Institute at the University of Wisconsin for the use of their resources. Professor Harold M. Levinson provided helpful criticism of an earlier draft.

¹ Three of the earliest studies in engineers and scientists are: U. S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook for Engineers*, Bulletin N. 948, (Washington: Government Printing Office, 1946), U. S. Department of Labor, *Occupational Mobility of Scientists: A Study of Chemists, Biologists and Physicists with Ph.D. degrees*. Bulletin 1121 (Washington: U. S. Government Printing Office, 1953), and Dave Singer, "The Mobility Patterns of Cornell Mechanical Engineers 1946-1954," Unpublished Master's thesis, Cornell University, 1957.

² The complete study is John E. Parker, "The Labor Market Behavior of Engineers and Scientists: An Analysis in the Aerospace Industry," (unpublished doctoral dissertation, University of Wisconsin, 1963).

³ In the literature internal market activity is often described as vertical mobility while the movement between firms is termed horizontal mobility. See Joseph Shister, "Labor Mobility: Some Institutional Aspects," *Proceedings of the Industrial Relations Research Association* (1950), pp. 42-59. This seems to be an unsatisfactory distinction, however, for movement can also be horizontal in the internal market. A somewhat broader view of internal movement is taken in Norman Martin and Anselm Strauss, "Pattern of Mobility Within Industrial Organizations," *Journal of Business*, Vol. 29 (April 1956), pp. 101-110. Strauss and Martin do not discuss the role of the external market and its impact on internal market activity.

one organization or company and controlled by that company's rules. Plant decentralization may extend the geographical scope of the internal market. In the context of this paper the internal market will be examined as a factor, like age and education, that is related to the volume and pattern of mobility. The assumption is that the internal-external market relationship will vary from firm to firm and will be related to a number of organizational variables. This exchange between these two markets may have an impact on the breadth of training employees receive, the characteristics of those in the external market, the costs of recruitment and mobility, and the incidence of these costs. The internal market can be viewed as an important structural variable which is a part of total mobility and which may affect the pattern of external market activity.

Dunlop, in testimony reprinted in *The Nation's Manpower Revolution*, stressed the importance of the internal market in the following way:

There is at least one fundamental way in which our conception of the labor market needs to be expanded and reformulated. We have thought of the labor market solely in terms of movement of workers between enterprises and from outside the labor force into an employed or unemployed status. But a general and comprehensive view of manpower must recognize the significance of the movement of workers within enterprises or within administrative areas governed by a common set of rules that may embrace a plant, a multiplant company or even a group of enterprises.⁴

While his statement was directed primarily to blue collar markets, it is appropriate for white collar markets as well and particularly the professional and technical occupations where careers are more well defined and where promotion and other types of internal movement play an important role in the total career. This study only begins to examine the role of the internal market and much of the evidence is largely qualitative in nature.

SOURCES OF DATA AND RESEARCH METHOD

Since most of the labor markets for engineers and scientists are national markets, only a national sample could properly capture the important facets of the market. In order to retain the national quality

⁴ U. S. Congress, Senate Committee on Labor and Public Welfare, *Nations Manpower Revolution*, Part I (1963), p. 302. An important early article that discussed the internal market is: Clark Kerr, "Balkanization of Labor Markets," in E. Wight Bakke and others, *Labor Mobility and Economic Opportunity* (New York: John Wiley & Sons, 1954), pp. 92-110.

of these markets while maintaining a sample size that was not too unwieldy it was decided to control the study by selecting two sectors of a relatively self-contained industry. The aerospace industry was selected for study and within it the propulsion sectors. This means, specifically, that the design and development personnel in the jet (gas turbine) and rocket engine industries were included. It must be stressed that these two sectors share a common technology to a large extent and require technical personnel with similar training and experience.

The collection of the data for this study took place in late 1962 and early 1963 and included information for the period January 1, 1953, to January 1, 1963. Five organizations distributed throughout the country were included in the study and with their permission a random sample of engineers and scientists was selected from their rosters and a questionnaire was mailed to each member of the sample. The sample was confined to males with at least an undergraduate degree. Approximately 50 percent of the sample or 1,298 engineers and scientists returned useable questionnaires. Additional information was obtained from plant visits and interviews with selected management personnel at each site.

Summary information shows that the typical respondent was 34 years of age, had a bachelor's degree in engineering with a major in mechanical engineering. His salary was \$11,258 and he had the expectation of reaching a peak salary in the \$15,000-19,999 range in from 6 to 10 years from the date of the survey. He is working in a state that is different from the one he was born in and also different from the state where he received his bachelor's degree. He also keeps relatively well informed concerning job opportunities in his field.

The five organizations are designated as sites in this paper. Some of the most important characteristics are presented in tables I, II, III.

It should also be noted that salary levels and salary ranges after correcting for the influence of experience, age and education were very similar to all locations except Site 3, the government facility. Here, entry salaries were competitive but at more experienced levels they were less competitive on salary. In addition, fringe benefits were very similar from organization to organization.

IMPACT OF THE ORGANIZATION

Labor market activity is conditioned by personal characteristics such as age and education and the environment in which the worker

TABLE I
Summary Table on Selected Site Characteristics

	Demand	Engineer-Scientists Total Employment	Parent Organization's Structure	Internal Market Policies
Site 1 Location: East Employment 2000	moderate	33%	8 other locations geographically dispersed	Little emphasis
Site 2 Location: East Employment 6000	moderate	20%	More than 75 locations widely dispersed	well developed, heavy emphasis ¹
Site 3 Location: Midwest Employment 3600 Government facility	very strong	50% Heavy research orientation— more specialization	5 locations geographically dispersed	some emphasis
Site 4 Location: West Employment 13,000	very strong	20%	5 locations dispersed but the majority are in one state	Some emphasis but no formal policy ²
Site 5 Location: West Employment 10,000	very strong	20%	4 locations but the majority are in one state	next to Site 2 the most emphasis and development of an internal market

¹ A central clearing house has been established for some engineer-scientist positions. This site's policies actively support intracompany movements and there are rules to regulate the flow between departments or sites of this organization. One rule is as follows: The employee's supervisor must approve the move and he can refuse if (1) the employee has been on his present job for less than one year; (2) the new position is not at least a two level salary increase, and (3) the new position is not a significant change in status. Also there is a list of open jobs and available people which is distributed throughout the company each month.

² A personnel specialist at this location noted in an interview that "internal transfers between departments and even within departments are largely informally arranged and unsystematically completed."

operates. One major factor in this environment is the nature of the employing organization and the personnel policies it pursues. Earlier writers have discussed the role of the employer but there has been little empirical evidence to support their hypotheses and to add important detail to our understanding of the allocation process. Parnes has hypothesized that greater intrafirm mobility may be at least a

TABLE II
Percentage Distributed of Age by Site

	Under 30	30-34	35-39	40 and over	Not Ascertained	Total	Average Age (Men)
Site 1	23	34	21	20	2	100	34.7
Site 2	22	34	21	23	....	100	34.8
Site 3	34	23	18	25	....	100	34.1
Site 4	30	24	19	26	1	100	34.8
Site 5	32	22	19	27	....	100	34.6
Total	31	24.5	19	25	.5	100	34.5

The median age is 33.

Approximately 11 percent are over the age of 45.

TABLE III
Educational Attainment by Site

	Bachelor's	Graduate	Not Ascertained	Total
Site 1	70	25	5	100
Site 2	80	18	2	100
Site 3	70	28	2	100
Site 4	72	23	5	100
Site 5	80	19	1	100
Total	73	25	2	100

partial cause of the observed long run decline in mobility. The impact of intrafirm movement has usually been missed for "the vast majority of the studies of labor mobility have not dealt with these intrafirm occupational shifts at all."⁵ Shister has stated that "particularly in the 'larger' firms, the greater opportunities for upward occupational movement will reduce the volume of horizontal mobility, other things being equal."⁶

The contours of an internal market and its influence on mobility will be related to the following factors:

(1) The available internal market for a given class of workers bears a direct relationship to the size of the organization and its growth experience. It could consist of a one-plant company and internal moves would take place within that plant. It could also consist of a cluster of plants in a local labor market. There the internal

⁵ Herbert Parnes, *Research on Labor Mobility* (New York: Social Science Research Council, 1954), p. 131.

⁶ Joseph Shister, *op. cit.*, p. 52. See footnote 3, page 2, for his mobility definitions. A. M. Ross in "Do We Have a New Industrial Feudalism?", *American Economic Review* (December 1958), p. 914, is convinced that this relationship is well established.

market could include transfers from plant to plant but with no geographical change. The case here is of organizations with plants or sites geographically dispersed and in other product markets. This means the internal market may have an industrial and geographical dimension. This would permit an industrial and geographical shift without a change in employer.

(2) The internal market will also be conditioned by the degree of specialization among the workers or the existence of non-competing groups. It may be that the scope is narrowed considerably for a specialist and his main opportunity is outside the present organization. It might mean that the apparent industrial and geographical dimension to the internal market is nonexistent. This will vary from one occupational specialty to another. A cost accountant would have full use of the market while an engineer who specializes in heat transfer would be much more limited internally. Also, the availability of managerial positions will condition the amount and pattern of movement in the internal market. Fewer management positions, with other factors the same, will reduce the opportunity for advancement and reduce the extent of internal movement, for managerial channels may often provide an independent avenue for advancement.⁷

(3) The available market may not be utilized fully unless the organization develops the internal market as a matter of general policy implemented by specific procedures. A general policy found in each organization in this study is the following:

To fill job vacancies by promotion from within the company whenever present employees are qualified.

A specific policy would be the use of a data processing system to set up a central manpower inventory for the organization. This was operating in one company in our study. The development of specific policies will determine the degree of emphasis an organization places on the internal market.

Whether the internal market is used with other factors the same, will depend on an evaluation by the organization of the relative costs of recruiting outside or transferring inside. This involves an analysis

⁷ See Harold Wilensky, "Work, Careers and Social Integration," *International Social Science Journal* (Fall 1960), p. 556. Wilensky discusses the structure of organizations and occupations and their mobility consequences. The variables he uses are organizational hierarchy, ratio of managers to those managed, growth, length of training, and geographical location. The engineer-scientist market provides an excellent example of the mobility consequences of these variables.

of relative salary and fringe costs, training costs, and recruiting costs; a judgment on the possibility of quality differences and some estimates of the relative vacancy period. Of course if demand is growing and changing rapidly in all parts of the company then the resources in the internal market are insufficient and external recruitment is necessary. If a policy of stockpiling is followed, for strategic purposes, a large, well used, internal market will probably reduce the period of under-utilization for those in industry.

From the individual's perspective, his judgment on whether to move in the internal market or outside of it will be related to an evaluation of both markets with the appropriate risk factors attached. The prospects of the organization, whether he is in his home area, and the costs of movement are a few of the important factors in this decision.⁸

Operationally, an intrafirm move or mobility in the internal market includes every change in position while still employed by the same employer. The type of work and/or the level of the employee in the organizational structure may be changed and in some cases this may be coupled with a change in geographical location. Each such change will be counted as an intrafirm move.⁹ An example may be helpful:

Internal Moves of One Engineer

1/53-6/57	Rocket Corporation Boston, Mass.	Junior-Test Engineer
6/57-7/59	Rocket Corporation Boston, Mass.	Senior-Test Engineer
7/59-present	Rocket Corporation New Haven, Conn.	Engineering Chief Test Group

Interfirm mobility counts all time spent with one employer as one job. It disregards changes in responsibility and type of work made during the period with each employer.

⁸ A reorganization of the plant or company could also lead to increased internal movement, some of which might be involuntary. This does not appear to be the case here, but it cannot be entirely ruled out as a factor explaining some of the differential between sites.

⁹ The author coded the positions using a consistent standard from site to site. This was based on his judgment gained from experience in the industry and information gathered during the study. It is believed that the internal figures are understated because the mailed questionnaire is limited when dealing with information of this nature.

The survey data are analyzed in Table 4 by total mobility and its components and a measure of geographic mobility for each site. Column 1 gives the percentage of those who have had a move either in the internal or external market. Column 2 and 3 give the figures for those who have been mobile internally (column 2) and interfirm (column 3). The final column gives a measure of those who have had some interstate mobility. This was also measured as moves between labor markets and the relative positions of the sites remained unchanged. The data show the same relationships when standardized by labor market exposure.

Site 2, as indicated in the description provided earlier in the paper, is a part of a large, geographically dispersed organization which has shown moderate growth in recent years. It has specific internal market policies and a variety of opportunity in the market due to product diversification. The employees at this site are high in total moves with most of their activity in the internal market. The interfirm experience is relatively low. Yet, geographical shifts are relatively high, indicating a substantial geographical scope to the internal market. The implication is that internal mobility substitutes for external movement in this market without diminishing and in fact increasing the geographical content of mobility. To control the internal market exposure a sample of respondents was selected from each site that had started work in the same year for their present employer. For example, the internal mobility was measured for those who started work in 1955 and 1956 with their present employer. The ranking by sites was undisturbed; Site 2 still had the greatest volume of internal movement and Site 3 had the least.

Because they have had a similar growth experience and are in the

TABLE IV
Percentage Mobile by Site on Each Mobility Dimension

	1 General Mobility	2 Internal (Intrafirm)	3 External (Interfirm)*	4 Geographic
Site 1	79	44	64	55
Site 2	94	62	49	69
Site 3	67	34	46	42
Site 4	79	49	54	39
Site 5	84	42	72	52
Total	79	45	58	45

* There is very little mobility between the organizations in this study. This is contrary to what was expected at the beginning of the study.

same product market, Site 1 and Site 2 can be conveniently compared. The main differences between the sites are the size and use of the internal market and, possibly, some difference in recruiting policy. Recruiting at entrance levels from recent college graduates and promotions from within will focus market emphasis primarily in internal activity. If recruiting is from other industry sources, the external movement index will increase. The tentative conclusion drawn from these comparisons is that the internal market supported by a college recruiting emphasis holds more engineers and scientists in the organization and yet gives them substantial flexibility internally.

Again, the nature of the internal market can be seen at work in Site 3, a government research establishment with a relatively flat management superstructure. There is less internal movement here because of relatively fewer vertical channels and a higher degree of specialization among the engineers and scientists creating more non-competing groups internally. While a good share of their professional careers have been spent with the same employer, much less internal movement has taken place than is found at Site 2.

Sites 4 and 5 offer less clear conclusions. Site 5's experience indicates somewhat greater recruitment from other employers from some geographical distance. This is probably due to the pressures of rapid growth in a relatively new industry.

From another perspective, there is a wide site-to-site variation in the ratio of man-years with present employer to man-years as a professional. This is a partial measure of career movement by site and results from the whole complex of location preferences, personnel policy, recruiting emphasis, and the growth pattern of each organization. Table V illustrates this pattern from site-to-site.

SUMMARY AND CONCLUSIONS

The organizational variable has been neglected in most labor market studies. However, it seems apparent that the internal market and correspondingly the organization—its structure and its policies—add an important dimension to labor market studies. The internal market has its impact due to factors of size, location, hierarchy and the extent of skill differentiation. The access to an internal market may be a major factor in explaining the consistent finding that mobility (external) is lower for white collar workers. It may also be a factor in explaining the decline in quit rates from earlier periods.

TABLE V

Ratio of Respondent's Years with Present Employer to Years as a Professional (Measured from First Professional Position)

	Average Man Years with Present Employer Per Respondent	Average Man Years as a Professional by Employer	Man Years with Present Employer
			Man Years as Professional
Site 1	6.4	11	.59
Site 2	8.1	10.7	.75
Site 3	7.2	10.5	.68
Site 4	5.3	10.2	.52
Site 5	4.3	9.7	.44
Total	5.8	10.2	.57

This study made only a beginning at measuring intrafirm movement and found that the scope and use of the internal market varied substantially from one organization to another and appeared to play an important role in altering the patterns of mobility. The internal market appeared to substitute for interfirm movement in one case and yet those with a strong attachment to the internal market also had substantial, geographical, and occupational movement. Organizations with a large, well-used internal market and with a recruiting policy that emphasized local market sources could expect to be more successful at holding their employees for a larger share of their professional careers.

The independent effect of the organization means that some additional dimensions of mobility can, within limits, be controlled through appropriate policies. If the internal market concept is supported by transfer and other personnel policies and complemented by recruiting practices the organization can exercise some degree of control over the incidence and patterns of mobility.

Decisions on organizational structure, location, product orientation and diversification and recruiting emphasis should take into consideration the impact various alternatives have on the volume and patterns of internal and external mobility.

The study of the internal market has important implications for labor market theory and policy. As an allocating mechanism, its use may reduce the risk of a lengthy vacancy that might occur if more uncertain sources are used. In addition, internal markets may permit a more rapid geographic response to supply and demand changes in different labor market areas. This, then, adds another dimension to

the firm's supply curves for specific occupations making them somewhat more elastic and certainly more predictable.

The use of the internal market can also contribute to a more flexible and adaptable work force for the evidence (not reported on here) is that in some organizations internal moves are more complex; that is, more likely to involve occupational and industry changes than interfirm moves. Finally, its use may reduce the costs of movement to the individual worker and instead shift this cost to the organization and ultimately to the consumer and public. It is the policy of the organizations in this study and also in most of industry to pay a good share of the transfer costs of these internal moves for their technical and managerial employees.

On the negative side, a well developed internal market coupled with a recruiting policy that emphasizes new hires at entry positions, may increase the "balkanization" in the labor market by building organizational barriers or enclosures in addition to the usual skill barriers. This can increase the importance of the first job and place an additional premium on labor market information in the selection of the first job. A related problem seen by some management personnel in this study is that an organization with a large, well used internal market may tend to hold on to the average employee while continuing to lose the above-average workers. Their feeling is that the internal market can become a haven and lead to inbreeding unless carefully watched.

It may also make the process of stockpiling engineering talent less costly because in a large organization with a developed internal market the period any one engineer or scientist may be underutilized due to a contract change or a delay in the completion of a proposal is probably less than in other situations.

Overall, once a worker is in a large internal market he probably reaps substantial benefits of additional training opportunities and diminished career risk. The negative aspects could be blunted to some extent by the encouragement of industry and regional manpower pools and transfer arrangements. This, however, awaits the emergence of new levels of cooperation between public and private groups in the manpower sphere.

While the craft worker has great opportunities for horizontal or interfirm movement but usually no internal market, and the industrial worker has the internal market but little external mobility, the technical

worker has both markets available to him: the external market with market forces dominating the scene and where competition appears to work well and the internal market where rules play a central role.

The use of the internal market concept opens up new avenues for future research that should add important knowledge to our understanding of labor markets. The concept of a complex organization is now included in models of decision making in the theory of the firm and it would seem imperative to deal with the impact of the large scale organization on labor markets. This will enable us to focus on mobility in the more complete context of career development.

While the concept of an internal market may appear to be a research thicket, it must be grappled with if we are to understand the true contribution mobility makes to efficiency in our labor markets and the contribution it makes to the fullest development of our human resources.

THE INFORMATION SYSTEM IN CHANGING LABOR MARKETS*

JOSEPH C. ULLMAN

Purdue University

and

DAVID P. TAYLOR

Massachusetts Institute of Technology

Continuing changes in the composition of the demand for labor, and the even more dramatic shifts in the size and composition of the labor force are receiving well-deserved attention. These changes will severely test the adaptability of our labor markets.

One important aspect of this adaptability is the operation of market information systems and their ability to adjust to modifications in the markets they serve. The President's Council of Economic Advisors recognizes the importance of these information systems by noting that, "For the labor market to operate efficiently, . . . workers must have knowledge of alternative employment opportunities, and employers must have a means of making their needs known."¹

Information systems are put under particular stress in situations characterized by a substantial growth or decline in the number of available jobs. In this paper we examine the information systems in two such situations in Chicago: the market for key punch operators and for unskilled Negroes.

The key punch occupation has been characterized by tight supply and substantial growth over the last several years. Total employment of these workers more than doubled in the Chicago area in the ten-year period ending with 1963.² In contrast, the market for unskilled workers has been marked by oversupply, and employment problems are particularly acute for members of minority groups. Virtually every

*The data on which this study is based were collected while the authors were on the staff of the Chicago Labor Market Study (hereafter called CLMS). The CLMS is presently being conducted at the University of Chicago under the direction of George P. Shultz and Albert Rees. We are thankful to them as well as D. V. Brown, C. A. Myers, A. J. Siegel and A. R. Weber for many helpful comments on earlier drafts.

¹U. S. President, *Economic Report of the President*, 1965 (Washington: U. S. Government Printing Office, 1965), p. 130.

²The Bureau of Labor Statistics Occupational Wage Surveys for Chicago show that key punch employment in Cook County increased from 2810 to 6222 between 1954 and 1963.

job displacement study has found that reemployment opportunities for unskilled Negroes are severely limited.³ Current Population Survey unemployment data support these findings,⁴ as do local figures. This analysis, then, will provide the opportunity to examine information systems and how they adapt in two contrasting "structural" situations; one in which there is a shortage of workers, and one in which there is a shortage of jobs.

THE OPERATION OF LABOR MARKET INFORMATION SYSTEMS

Information systems in any market have the function of bringing buyers and sellers together. A variety of methods are used for this purpose in the labor market and these methods are usually divided into formal and informal. Informal methods include gate applications and personal referrals. Formal sources are employment agencies, both public and private, newspaper want-ads, unions, schools, etc. There are many sources to pick from, and most labor market studies have found that blue collar workers generally use informal methods to get jobs,⁵ while white collar workers often rely on formal methods.⁶ These usage patterns are undoubtedly affected by labor market conditions, and we will consider this factor in our analysis below.

Since workers and employers presumably use the lowest cost information channels available, other things equal, it is important to consider the source of financial support for various intermediaries. In loose markets we would not expect employers to pay for information about job seekers, while in tight markets they may be required to do so. Similarly, in the unskilled market the job seeker pays private agency fees while in the key punch market in Chicago this happens only rarely. Of course a number of formal intermediaries are supported from tax revenues or charitable contributions and are "free" to the job seeker and employer.

³ For a summary of the findings of a number of studies on this point see William Haber, Louis Ferman, and James R. Hudson, *The Impact of Technological Change* (Kalamazoo, Michigan: W. E. Upjohn Institute of Employment Research, September, 1963) pp. 16-19.

⁴ Negro unemployment rates are running just under double the white rates. See *Employment and Earnings*, U. S. Department of Labor, April, 1965.

⁵ Many of these are summarized in Herbert S. Parnes, *Research on Labor Mobility* (New York: SSRC, 1954) pp. 164-5.

⁶ George P. Shultz, "A Non-Union Market for White Collar Labor," *Aspects of Labor Economics* (Princeton: Princeton University Press for the National Bureau of Economic Research, 1962). Eaton Hall Conant, "Wages and the Behavior of Firms and Workers in a Clerical Labor Market" (unpublished Ph.D. dissertation, University of Wisconsin, 1960), p. 115.

Our investigation of the information systems in the key punch and unskilled markets is primarily directed at the adaptations these systems have undergone as a result of changing labor market conditions. How and why do additional sources of information about job seekers and job openings develop? What form do the information sources take and how effective have these adaptations been?

THE INFORMATION SYSTEM IN THE MARKET FOR
KEY PUNCH OPERATORS IN CHICAGO

Information about Chicago key punch jobs and workers is provided by several kinds of formal intermediaries, as well as by informal information channels. Table I gives an indication of the relative importance of the various information channels in this market.

The individual channels serve somewhat different clienteles, and their relative importance has varied as the market has grown. Characteristics of each channel are summarized in Table II.

Perhaps the most interesting information channel in this market is the *private employment agency*. There are well over a hundred of these agencies that have at some time placed clerical workers in Chicago, and most of them have acted as intermediaries in the placement of key punchers. These agencies are widely scattered, and they tend to serve local sub-markets within the Chicago area.

The general clerical agencies have served the key punch market during all of the 1954-63 decade, but they have increased in importance

TABLE I
Sources of CLMS Key Punch Operators Hired Between
January 1, 1961 and June 30, 1963 *

Source	Number	Per Cent
Walk-in	26	9.0%
Employee referral	101	34.8
Other referral	6	2.1
Newspaper want ad	40	13.8
Private Employment Agency	29	10.0
State Employment Service	9	3.1
High School	9	3.1
Private training school or IBM	43	14.8
Rehire	24	8.3
Miscellaneous	3	1.0
Total source known	290	100.0%
Source unknown	64 (18.8%)	

* Table restricted to hires in this period to reduce the impact of market fluctuations on employment activity.

TABLE II
 Characteristics of Major Information Channels in the Key Punch Market in Chicago

Channel	Fee	Applicants Using	Area Served	Employers Using	Sample Share
Private employment agencies	Usually employer	Experienced and Trainees Mostly from newspaper ads	Local	Desire to avoid screening costs	10.0%
Newspaper want ads	Employer	Experienced and Trainees Readers of the paper	Metropolitan or local	Willing to incur screening costs	13.8%
High Schools	Free	Trainees—recent graduates	Mainly local	Able to use trainees	3.1%
State employment service	Free	Experienced and Trainees Usually unemployed	Chicago and suburban	Willing to screen or accept low quality	3.1%
International Business Machines Corporation	Free	Experienced and Trainees Unemployed only	Metropolitan	IBM customers willing to screen or accept low quality	14.8%
Private training schools	Free	Trainees—recent graduates	Metropolitan	Able to use trainees	14.8%
Employee referrals	Free	Contact of present employees	.....	Most employers prefer this channel on grounds of superior applicant quality	34.8%
Walk-ins	Free	.....	.....	.....	9.0%
Rehires	Free	Former employees	.....	.....	8.3%

as the market has grown. While 10 per cent of the CLMS key punchers hired after 1961 were recruited through this channel, only 4 per cent of those hired before 1961 went through agencies.

There are two agencies that specialize in data processing occupations, one founded in 1955, the other in 1962. Both are located in downtown Chicago, and neither has ever had an important percentage of total key punch placements.

The agencies' nominal fee for key punch placements was 72 per cent of the first month's salary at the time of the study. Most Chicago agencies advertise "never a fee to the applicant," except in the Indiana portion of the area. In practice, it appears that there is a good deal of variation in the amount of the fee, and to a lesser extent, in who pays the fee.

Agencies do not place all their applicants or fill all their job orders. One agency was currently filling about one-fifth of its job orders, and was placing a comparable proportion of its applicants. The agency manager said that this performance was typical, and visits to other agencies confirmed his estimate.

In return for their relatively high charges, agencies offer employers prescreened applicants and fast service. They attract applicants primarily through newspaper ads which list their most opulent job orders.

Newspapers have always been important in disseminating information in the key punch market. There are four metropolitan and dozens of suburban, ethnic, and neighborhood newspapers in the Chicago area. Although not large individually, the non-metropolitan papers are collectively very important in the key punch and other clerical markets. The publishers of these papers point to the selectivity of their readership in promotional material, particularly with regard to ethnic characteristics. This homogeneity of readership reduces screening costs and is a major factor in the popularity of the neighborhood papers among employers seeking clerical workers. Ads in metropolitan papers are likely to attract a large number of clerical applicants, and so these are used primarily by larger firms. The cost of want ads is a small fraction of the typical agency fee, but ads are less effective in pre-screening applicants.

Whereas both private agencies and newspapers charge fees for their services, many intermediaries do not. The *Illinois State Employment Service* serves clerical occupations through one city office and nine

suburban offices.⁷ The Indiana part of the area is serviced by three offices of the Indiana State Employment Service.

In June and July, 1964, the Chicago clerical office reported the following placement activity.

Total job orders	2450
Total applicants	8666
Total placements	1370

Most of the employment service applicants are unemployed, and unemployment has negative quality implications in tight markets such as the key punch market. Thus the employment service may be said to specialize in low-quality clerical workers.

International Business Machines Corporation also served unemployed workers.⁸ Before 1959, IBM was a major factor in the key punch market in Chicago, with placements averaging over two hundred per year. Between 1959 and October 1963, when the office was closed, IBM played a less important but still substantial role.

In addition to walk-ins and referrals by customers, IBM took non-customer trainees during most of the period when the placement office was open, and they attempted to find jobs for those trainees who desired placement assistance.

Prior to 1957, IBM and the other equipment manufacturers controlled all formal training of key punch operators. In 1957 *private training schools* began to appear. There are now several of these schools in the area, concentrated in the central city. They provide employers with a source of trained, but inexperienced workers.

High schools are another source of inexperienced workers. Each of the Chicago public high schools operates its own placement service. Three large public utilities, able to hire a large number of inexperienced workers each year, were the only CLMS employers that made heavy use of high schools for recruiting clerical workers. Many other employers noted that their need for trainees was too sporadic to allow them to establish the contacts with teachers that are necessary for successful school recruiting.

Despite the proliferation of formal intermediaries in the Chicago key punch market, the majority of placements are still made through

⁷ Prior to 1962, the clerical market in Chicago proper was served through a group of neighborhood offices.

⁸ IBM served only unemployed applicants, as the company did not wish to be charged with "stealing" workers from one customer for another.

informal channels. Interviews with CLMS employers and workers help explain the popularity of such channels. Employers usually based their preference on the low cost of such channels, and on the superior quality of employee referrals.

The referral channel also has advantages for the job-seeker. His ability to find out in advance what a job will be like may be substantially improved by his having a friend at the place where he is considering applying.

While employed workers were the source of over one-third of the CLMS key punch operator placements, less than 10 per cent of the sample placements were walk-ins. This is encouraging, because applicants who use this method of search are likely to be less informed than are workers using other sources.

A third informal channel, rehires, is an efficient one for both workers and employers because of the large amount of information they possess about each other. There is no need for a trial period on either side.

Rehires have become increasingly important as the key punch market has aged, and a reservoir of experienced workers moves in and out of the labor market, and from job to job.

THE INFORMATION SYSTEM IN THE MARKET FOR UNSKILLED NEGRO MALES

In contrast to the conditions in the key punch market, the demand for unskilled Negroes has become severely depressed. For that reason we concentrate more on the efforts of job seekers to find work than on the recruitment activities of employers. As the market for an occupational group deteriorates we would expect informal sources of information about jobs to become less effective. Random gate applications will turn up relatively fewer job openings when markets are loose than when they are tight. Similarly, sources of job information from friends and relatives will dry up since the unskilled job seeker will probably associate with people who are also unskilled and unemployed. It would seem unusual for unemployed job seekers to have information about openings to pass on to unemployed friends and relatives.

Formal sources also become less effective as the market weakens. First, the employer-paid formal source (i.e. newspaper ads) virtually disappears. Second, the formal agencies must search more widely in efforts to find an opening for a client. This decrease in effectiveness of formal sources, however, is less serious than in the case of informal

sources because of the ability of such agencies to exploit their specialization. That is, when it takes a job seeker an entire day to apply at five factories to find an opening, and a counselor at an employment agency can conduct the same search activity in fifteen minutes, it is more economical for the job seeker to use the agency.

In the tabulations below which bear on the relative use of job search methods we separate newspaper want-ads and unions from other formal sources because these are special intermediaries in the Negro unskilled market. Employers pay for ads and we are interested here in shifts to sources supported by job seekers or the public. Furthermore, there is some question about the ability of Negroes to gain access to union sources.

Over three hundred unskilled Negroes were interviewed at a variety of intermediaries in Chicago in 1963-64. Of these, 151 reported different jobs as their first in Chicago, their longest and most recent. The method used in finding each of these jobs showed a marked shift from informal sources to formal agencies over time, i.e. from the first to the most recent, as shown in Table III.

Support for these findings was contributed by other CLMS data. In this case we can contrast the experience of whites and Negroes (see Table IV). Since unemployment is more serious among unskilled

TABLE III
Methods Used by Negroes to Find Various Jobs in Chicago

Jobs in Chicago	Percentage Distribution			
	Informal	Formal Agencies	Union, Newspapers and Other	N
First	84%	9% ^a	7%	151
Longest	82	10	7	151
Most Recent	66	21 ^a	13	151

^a Differences between these percentages significant at the 1% level.

TABLE IV
Method Used to Find Present Job
CLMS Material Handlers and Janitors Hired
Between January 1, 1961 and June 30, 1963

Group	Informal	Formal Agencies ^a	Union, Newspaper, and Other	N
Negroes	67%	24%	9%	119
Whites	77%	6%	17%	223

^a Difference between percentage of whites and Negroes using formal agencies is significant at the 1 per cent level.

Negroes than unskilled whites, we would expect Negroes to rely more heavily on formal agencies.

This discussion must be matched against the conceptual framework of earlier studies which indicates that employers, when faced with a softening labor market, shift their recruitment efforts from formal sources such as private agencies and newspaper ads to informal walk-ins and personal referrals.⁹ The employer moves from the expensive to the inexpensive sources of recruitment. But in the unskilled market none of the formal intermediaries impose a direct cost¹⁰ on the employers, and the contacts are virtually always initiated by the agencies. Hence, the two sets of data are not contradictory.

If, as Tables III and IV suggest, informal sources are relatively less effective, what has occurred in the market as an adaptation to this event? For one thing there has been a proliferation of new intermediaries and in some cases additional programs by traditional agencies to fill the gap left by the deterioration of the informal sources. That is, as it has become necessary for job seekers to intensify their search activity, institutions have developed to facilitate this effort. The development of these institutions, it should be noted, is related to many factors; civil rights activity, greater public awareness of social problems, etc. as well as to economic conditions.

The largest single placement agency in the Chicago unskilled market is the *Illinois State Employment Service*. The General Industrial Office handles the placements of a large proportion of the unskilled workers who use the State facilities. In 1962 a consolidation of facilities from six neighborhood offices to one large loop office alleviated some administrative difficulties and had the further salutary effect of preventing employers from using the Employment Service in a racially discriminatory way. Under the old system, the employer could place a job order with a branch of the ES in a white neighborhood and practically ensure that he would not have any Negroes referred. With the centralized office this approach to hiring is impossible. The consolidation did, however, seriously affect the accessibility of the SES, and in general increased the transportation costs of its clients.

The General Industrial Office devotes considerable resources to

⁹ Richard C. Wilcock and Walter Franke, *Unwanted Workers* (Free Press: Glencoe, 1963) p. 130.

¹⁰ Some impose greater screening costs than others.

developing job orders. During July, 1964 (which was described as a typical month) its fifty-four counselors made 1,724 telephone contacts with employers and carried out 244 plant visits. These activities brought in 1,479 job orders but in that month there were 20,538 applicants of whom only 2,098 were referred to jobs.

Another government agency which plays a large role in the placement of unskilled workers, particularly Negroes, is the *Welfare Rehabilitation Service* of the Cook County Department of Public Aid. The WRS was originally established to train handicapped workers but since about 1958 it has become involved directly in the placement of employable relief recipients. As such it averages about 1,000 placements a month.

The 1963 Chicago Classified Telephone Directory listed thirty-five *private employment agencies*, which, according to their ads, make placements in the unskilled market. Eleven of these ads included a specific racial reference. For example, one agency would provide "white and colored" workers and another listing mentioned "Colored Help." The 1964 Directory listed only three agencies with racial references in their ads as a result, no doubt, of pressure from civil rights groups and sterner enforcement of the State FEPC.

Many of these agencies specialize along occupational or industry lines and, although it is difficult to document, there is undoubtedly specialization in regard to quality of clients. An employment agency owner we interviewed made it clear that he referred applicants who did not meet his standards (under 45, clean-cut, good work history) to the agency upstairs which had lower standards and less attractive jobs listed.

From the qualified job seeker's point of view, one of the benefits of using agencies is that they can generally provide jobs quite quickly. As one user of such agencies said, "Otherwise you spend your time looking on your own and in a couple of weeks your money is all gone and you can't even afford to buy a job."

In recent years a number of new *charitable agencies* have joined the long-established ones in providing job information to unskilled workers. Thus the Urban League, established in 1916, has been joined by the Seventeenth Ward Free Employment Service, the Greater Harvest Baptist Church, the Lawndale Interracial Missionary Baptist Church and others. These agencies are uniquely convenient to the Negro unskilled job seeker. All are located in Negro neighborhoods and each

one has the ability to spread the knowledge of its services easily throughout the local community.

The importance of availability and convenience was made clear during an interview of a job seeker at the Welfare Rehabilitation Service. This man had been out of work for a week and was ineligible for UCB. He had been looking for a job throughout the week and by Friday had exhausted all his savings and was already in debt to the local grocer. As a result, he was unable to afford care fare and had walked from his home to the downtown WRS office to apply for an emergency relief grant to provide food for his wife and infant son over the weekend. His apartment was approximately eleven miles from the Welfare Rehabilitation Service.

The Urban League is working on special programs to place the unskilled. Three of these programs were underway or in the planning stage at the time of our study. One involved training gas station attendants in conjunction with Shell Oil Company and another provided taxi drivers to Yellow Cab Company. A third was designed to train flat and industrial janitors in cooperation with the Building Service Employees International Union. No final results were available but initial progress was very encouraging. Strictly speaking, these are training, as well as placement programs, but their actual training content is limited. More broadly, they represent an attempt to extend the search efforts of the workers involved by providing work orientation.

While the smaller and newer agencies had only limited resources to devote to placement activity they were closely attuned to the needs of the local community and their communication networks are excellent. (One such agency used hairdressers and barbers to spread the word about the various employment programs it was conducting.) Similarly, because a group of prominent Negro citizens felt that many Negroes were failing to take advantage of the programs available under MDTA since they were unaware of them, an office was established in the heart of the Negro community to publicize these programs.

THE EFFICIENCY OF THE INFORMATION SYSTEM

The highly specialized information system in the key punch market appears well-suited to the needs of employers. The abundance of channels allows the employer to select his least expensive source and move to progressively more costly ones if his preferred source does not meet his needs. Several channels (for example, want ads

and agencies) provide workers with quick ways to get information about jobs and wage rates, and in this sense the information system appears adequate from the workers' viewpoint as well. This is reflected in the fact that 87 per cent of the key punchers interviewed had never been without a job and looking for work for as long as 30 days and only four had been in this position more than once.

The key punchers were also asked, "What did you know about the wage you would receive at this company before you applied here? The 152 usable replies to this question are summarized below. Furthermore, it appears that those with information about the firm they chose also had information about other openings; the rank correlation between firm wage level and the percentage of workers in each firm who possessed wage information was .40, significant at the 5 per cent level.

Amount of Wage Information ¹²	Number	Percentage
Knew specific wage	19	12%
Knew approximate wage	42	28
Knew only fringe benefits	9	6
Knew nothing about wage	82	54

How effective have the adaptations in the unskilled Negro market information system been? It should be noted that a number of the institutions which are active in this market are socially oriented and non-economic, and this makes it difficult to develop a strict judgment as to their efficiency. It seems clear, however, that as the usefulness of informal sources of job information declined, and more intensive job search methods became essential, a variety of institutions of specialized character evolved to help effectuate this intensified search effort. These agencies provide information to clients of disparate needs and backgrounds, and use imaginative and apparently effective channels of communication.¹³

From the employers' side, it appears that the present information

¹²In a half-dozen cases, the investigators put individuals in the "knew approximate wage" category even though the respondent said that they had no wage knowledge. In each of these cases, the interviewee's husband, sister or friend worked in the data processing department at the company at the time the interviewee applied for the job, and we believed that it was not conceivable that the interviewee literally "knew nothing about wage." On the other hand, when the interviewee reported no wage knowledge and had a friend or relative at the establishment (but not in the data processing department) we put the response in the "knew nothing about wage" group despite the possibility that these individuals had at least some information about the firm's wage level.

¹³Conversely, much of the literature suggests that there is a shortage in this market of information on openings, and that additional public resources should be devoted to improving greatly the information flows.

TABLE V
Percentage with Some High School or More

CLMS	Negroes	N	Whites	N
Unemployed	51%	316	48%	75
Employed	86	163	77	365

systems are leading to the employment of the higher quality workers. Table V compares the educational attainment of the unemployed CLMS interviewees with the material handlers and janitors who were hired in or after 1961.

Not only were the employed better educated than the unemployed (and the difference between the two groups is even greater if we use high school graduation as the cut-off) but the schooling they received tended to be in areas with schools that are generally thought to be of higher quality. Thus, 34 per cent of the employed Negroes went to school in the Chicago area and 18 per cent in the rural south; for the unemployed Negroes the percentages were 26 per cent and 50 per cent respectively.

Furthermore, the material handlers and janitors have not faced frequent long periods of unemployment. In their entire working lives, 84 per cent had fewer than two periods of 30 days or more when they were without a job and looking for employment.

The information systems in both the key punch and unskilled Negro markets have altered form as the character of the markets has changed. This suggests that there is no "ideal" information system, and that it is important to retain adaptable systems in order to meet changing needs. While this study did not attempt to measure the speed of the information systems' response to new conditions, it is of course also important that altered needs be met quickly.

CONCLUSION

This paper has described and attempted to evaluate the information systems in two labor markets that have recently undergone rapid change. No gross deficiencies were found in either information system, and the investigators are impressed by the coverage, adaptability, and apparent efficiency of both systems.

While this study did not attempt to establish the possible returns from additional investments in improving information systems, particularly in improving their ability to identify areas of concern in the

future, it does suggest that other problems, such as inadequate demand for the unskilled and shortages of workers in new occupations are the important sources of our current employment difficulties. As the Employment Service, itself, recognizes "while the ultimate objective is the placement of the worker in a suitable job, for large numbers this is likely to be the final step in a long process designed to increase employability."¹⁴

¹⁴ *Manpower Report of the President, March, 1965*, p. 161.

DISCUSSION

ROBERT L. ARONSON

Cornell University

Complete justice to these three papers would require an extensive review and evaluation of the development and present state of research on the structure and functioning of labor markets. Since time and space do not permit such a review, let a too brief survey serve as notice that my comments are directed at least as much to the general state of labor market research as to these particular contributions.

By the middle, and certainly by the end, of the 1950's, the early postwar stream of research on labor mobility and labor market organization and structure had diminished to a small trickle. The general conclusion of these earlier studies, that the connection between wage determination and mobility in the labor market is at best a tenuous one, and corollary propositions about mobility rates and the respective characteristics of mobile and nonmobile workers had become assimilated into the newer textbooks as explanation and description of the labor marketing process. As attention was being directed elsewhere, the acceptance of periodic study of workers' job-changing behavior in the Bureau of Labor Statistics' program of labor force surveys seemed to signal an exhaustion of conceptual and theoretical interest.

Of course, it was never claimed that the findings and conclusions of these earlier labor market studies were to be received as definitive. Indeed, their authors took pains not only to emphasize the limits within which their results could be generalized, but in most instances called attention to the empty boxes that remained.¹ In addition, some defenders of the neo-classical labor market model contended that the findings of these studies, far from constituting a successful assault on the model's explanatory value, strengthened its basic foundation.² Labor market research was thus left in a state of relative inactivity, with various central issues unclearly resolved and others yet to be examined, awaiting fresh ideas, new supplies of intellectual energy, and especially a stimulus to renewed interest and investigation.

¹ See esp. Herbert S. Parnes, *Research on Labor Mobility* (New York: Special Science Research Council, 1954); Clark Kerr, "The Balkanization of Labor Markets, in E. Wight Bakke and others, *Labor Mobility and Economic Opportunity* (New York: Wiley, 1954), pp. 92-110.

² See Simon Rottenberg, "On Choice in Labor Markets," *Industrial and Labor Relations Review* (January 1956), pp. 183-199; also *ibid.*, July 1956, pp. 629-643.

Efforts to find practical answers to our manpower problems—unemployment, shortages in critical occupations, and manpower adjustment to technological change—have already reawakened interest in the functioning and structure of labor markets. Among the leading unresolved problems is the nature and role of labor mobility. A deeper understanding of this phenomenon will help us to evaluate and act on the factors that account for change in the level and incidence of unemployment, or which govern the persistence of shortages in certain critical occupations. Despite the recent improvements that have been made in the organization, administration and programs of the public employment service, many observers continue to point to the labor marketing process as among the weaker links in our manpower system. Our general notions about this process and the preferences of workers and employers for certain job-seeking and hiring channels are probably accurate enough, but also too general to provide guidance for changes in employment service programs and operating procedures. Among other urgent analytical needs are improvements in manpower forecasting, increased knowledge of skill transferability and job families, and a more comprehensive scheme of measuring and reporting current labor market activity.

The relevance of these three papers to needed labor market research is readily apparent. All of them penetrate in varying degrees into areas that have been relatively neglected and which are useful to study. In at least one instance, we have an explanation of the logic of on-the-job training superior to any other of which I am aware; Professors Doeringer and Piore have done a first-rate job in showing how such training develops as an employer response to the limitations of the external labor market in adapting labor supply to changes in the composition of labor demand.³ Although the critic's task is complicated in this case by the lack of a tailor-made common theme, the conceptual and substantive overlaps among these papers are sufficiently great that no large injustice will be done in treating them primarily in terms of three broad issues: (1) the concept of the internal labor market; (2) the interconnections between the external and internal labor markets; and (3) the adaptability and efficiency of the market mechanisms.

³ Cf. Jacob Mincer, "On-the-Job Training: Costs, Returns, and Implications," *Journal of Political Economy*, Vol. 70, Supplement, October 1962, pp. 69-72; Walter Y. Oi, "Labor as a Quasi-Fixed Factor," *Journal of Political Economy*, Vol. 70 (December 1962), esp. pp. 550-552.

1. Despite the common terminology, consideration of two of our papers indicates that the "internal labor market" is not yet a unified concept. Between Professor Parker and Professors Doeringer and Piore, there are some important differences in definition and their respective views of the origins and function of the internal labor market. Doeringer and Piore define the internal market as congruent with the plant or establishment, while Parker uses the firm as the relevant unit. In the five cases in the aerospace industry which he studied, the firms are of substantial size and in all instances include more than one plant location; in terms of number of locations, the minimum is four, while one firm is composed of "more than 75 locations widely dispersed." Since labor market areas are usually defined in terms of the effective range of labor mobility, this is not a trivial difference in their respective concepts. For aerospace engineers and scientists, the firm may indeed be the relevant internal market; under present institutional arrangements, however, it is very unlikely to be the relevant market for the production and maintenance workers on whom Professors Doeringer and Piore concentrated their attention. Indeed, as we may infer from studies of occupational mobility, only some portions of either the plant or the firm constitute the effective internal labor market, and the occupational group must be specified. Professor Parker recognizes this difficulty, but does not develop the possibility of internal sub-markets.

There is also a sharp difference between these two papers with respect to the origins and function of the internal labor market. For Doeringer and Piore the origin of the internal labor market is primarily technological, modified by the cost constraints of recruitment, hiring, and especially training. It is the employer's response to the inability of the external labor market to make sufficiently fine adjustments in the quality of labor supply to changes in the internal structure of labor demand arising from the almost continuous variation in job content. For the aerospace engineers and scientists, on the other hand, the internal market develops mainly as a substitute for the external market in providing opportunities to workers for advancement and other job goals while minimizing the private costs of market search and movement. Although the internal market in this instance may also serve employer needs, such as a reduction in the costs of recruitment and hiring, this seems to play a secondary role in its development and utilization. Of course, it is possible that no real conflict exists between

these two accounts; Professor Parker's organizational variables (for example, size of firm) may be proxies for certain technological determinants of occupational structure.

2. Both of the papers just discussed make certain observations about the interplay between the external and internal labor markets. I have no basic disagreement with the observations made, but both accounts leave some questions unanswered. If I understand his position correctly, Professor Parker believes that the internal market's contribution to the allocation of labor is positive, tending to increase the short-run elasticity of labor supply. It should be recognized, however, that this conclusion may depend on the scope of the internal market and the degree to which it constitutes a closed system. Professor Parker's data show that the proportion of those who have made an interfirm job change exceeds the proportion of internal job changers. Of more relevance to the case, however, is the proportion of the total movements accounted for by each market; even on the basis of the number of job changers, the difference is not sufficiently large in some of the cases studied to foreclose the possibility of a substantial degree of monopsony. On more general grounds, the structure and functioning of the internal labor market are probably quite dependent on the nature and behavior of the external market. It would be extremely useful in any case to study the former in a variety of circumstances representing different degrees of competitive labor market structure and behavior.

Professors Doeringer and Piore have argued a rather tight case with respect to the role of internal training, and it is entirely appropriate that such training be viewed as only one of various modes of adjustment to scarcity in a tightening labor market. Incompatibility between job requirements and skills seems to be ever-present, however, and it is on this account that I fail to see why internal training per se should be more inflationary than any other mode of adjustment. This conclusion seems to rest on some assumptions about the institutional rules governing the operation of the internal labor market, such as the application of seniority in transfers and promotions. But Doeringer and Piore also admit that such rules are not necessarily perverse in their effects on the allocation and utilization of the work force. It might, in fact, be argued that in many instances the rules established under collective bargaining reduce the costs of adjustment to the firm, for example, by reducing worker resistance to technological change. In addition, it should be noted that, under certain piecework and incentive

payment systems, the cost of training may be partially shifted to the workers. Perhaps the main point is that we have insufficient information about the cost incidence of education and occupational training and that we need therefore to study more closely the institutional factors involved.

Although neither Professor Parker nor Professors Doeringer and Piore is directly concerned with the process of wage determination, it may be useful to consider its relationship to training and labor mobility. In this respect, the internal labor market appears to be very odd indeed. Generally, it is a market within which wage relationships appear to play a minimal role in adjusting labor supply and demand; one observer, in fact, has postulated that for a substantial number of higher-paying jobs the number of workers in the firm or plant willing and able to accept such jobs usually exceeds the number of opportunities. This appears to be a function of the degree to which the technology and product mix create a joint demand for labor.⁴ An implication is that the better jobs are rationed; actual interoccupational movement is therefore limited, though there may be substantial mobility in the "pure" sense of a propensity and willingness to change jobs. If it is true that a substantial number of workers potentially can move over a wide range of jobs, which Professors Doeringer and Piore do not deny, then it is at least open to question as to whether internal training mainly reflects an imbalance between job structure and the labor force, or whether it represents in some degree bad internal pricing imposed by custom or union rule. The latter would be especially relevant in those instances where, in a technical sense, the plant job structure is relatively open to the outside market.

3. Description of changes in the information systems in labor submarkets is undoubtedly useful. One can readily concur with the conclusion that there is no natural or "ideal" information system, and in this respect perhaps we have been led astray (but only slightly) by the findings of earlier labor market studies. On the other hand, I am less persuaded that the findings reported by Professors Ullman and Taylor really tell us very much about the adaptability of systems of job-seeking and recruiting to changing labor market conditions.

In the case of the key punch operators, insufficient attention may

⁴E. Robert Livernash, "The Internal Wage Structure," in George W. Taylor and Frank C. Pierson, eds., *New Concepts in Wage Determination* (New York: McGraw-Hill, 1957), pp. 141-143.

have been paid to the nature of the work force. This occupation is probably predominantly, if not exclusively, female. Because of the volatility of female labor force participation, one can readily understand, in addition to the quality factor, employer preference for such low-cost channels as employee referrals. On the other hand, the growth in importance of the private employment agencies and of rehires may also be explained in terms of the nature of the labor supply. Job content in such an occupation probably does not vary much among users, on-the-job training is probably minimal, and it is relatively easy to specify and measure quality. In combination with turnover, it is possible that these factors over time would tend to increase both the numbers of key punch operators in the labor reserve and the usefulness of formal recruitment channels. Though it may involve a variety of considerations other than technical proficiency, it also may be noted that the capacity for screening applicants was unusually important as a determinant of the choice of information channels in this job market.

The case of the labor market for unskilled Negroes is also somewhat ambiguous. Here, as the authors admit, social consciousness and nonmarket factors were important in the proliferation of formal market intermediaries and changes in the programs of existing public agencies. Neither the Negro shift toward increased use of formal agencies of job-seeking nor the Negro-white differential in this respect, however, necessarily represents adaptation of the information system. A few labor market studies based on lifetime or long-period work histories show that the use of formal agencies tends to increase serially as a function of labor force exposure.⁵ Since we have no information about the relative exposure of the white and Negro material handlers and janitors to the metropolitan labor market, we can only speculate that this was a factor in their labor market behavior. If, however, the former were composed mainly of recent migrants to the Chicago metropolitan area, it could be that their labor market behavior is largely a facet of incomplete socialization in an urban setting.

In summary, these are three worthy contributions in an area of labor market research that had been suffering from premature neglect.

⁵ See Leonard P. Adams and Robert L. Aronson, *Workers and Industrial Change* (Ithaca: School of Industrial and Labor Relations, Cornell University, 1957), Table V-5, p. 77. Ninety percent of the workers in the local labor force used informal methods in finding their first jobs, but only 67 percent used such methods in finding their current or most recent jobs.

I share with three of our authors the conviction that studies of the internal labor market will provide important insights into the role and nature of the allocation process under the impact of industrial and technological change, on the one hand, and the changing composition and character of the labor force on the other. Their research indicates both caution in generalizing about labor market behavior and the need for more studies of specified occupational groups and labor submarkets. The paper by Professors Ullman and Taylor, despite some ambiguities in the analysis, also indicates that there are regularities and patterns in the labor marketing process, which can be revealed through systematic, controlled observation.

IX

**JOINT MEETING WITH AMERICAN
FINANCE ASSOCIATION**

**UNION AND MANAGEMENT
INTERESTS IN THE INVESTMENT
OF PENSION FUNDS**

Emanuel Stein, Chairman

UNION AND MANAGEMENT INTERESTS IN THE INVESTMENT OF PENSION FUNDS

EMANUEL STEIN
New York University

From the first appearance of significant numbers of collectively-bargained pension plans during World War II, there has been sustained public interest in one or another aspect of such plans. In the early years, there was much concern over possible abuses in the management of plans which were under exclusive union control; to this concern may be attributed the provisions of the Taft-Hartley Act barring the establishment of new trustee (self-insured) plans under the sole control of the collective bargaining representative. More recently, interest has been focused on the investment policies pursued by the trustees (management and union designees) of these plans—on what they do with the funds placed in their custody and why they do one thing rather than another. It is to these questions that the afternoon's program is addressed.

Obviously, the threshold investment decision involves the choice between turning the funds over to an insurance company and turning them over to a joint board of trustees under a so-called self-insured plan. Under the former, the first investment decision is also the last, save for the possibilities of terminating the insurance arrangement or transferring to a different carrier. The funds paid over to the insurance company are merged with its other funds and, as a general matter, will bring a return reflecting the carrier's earnings on its overall ledger assets. Neither the employer, nor the union, nor the individual annuitant has any voice in the determination of the insurance company's investment decisions—any more than they would in the investment of premiums paid for life or casualty insurance.

Under a self-insured or trustee plan, the locus of the power to make investment decisions is not always easily determined. Available data do not enable us to make distinctions in this respect between joint union-management trustee plans and those which are solely employer-administered, but it is clear that trust companies and similar institutions play a large role:

. . . Of all the pension funds held by New York State banks in September, 1955, 89 percent gave the trust company the responsibility for investment either exclusively or subject to the veto, direc-

tion, or approval of the employer or other administrative agency; in 69 percent the trustee alone determined the investments; in only 10 percent did the banks act simply as custodians. The tendency to give full power to the trust company was even greater among the larger funds.¹

It may be assumed that, even where broad discretion is vested in the corporate trustee, there will be discussions relating to policy matters, types of preferred investments, and the like. In any event, the pension fund administrator or board (as distinct from the trust company) presumably retains the power in all instances to lay down the general policies to be followed by the trust company, so that the latter's exclusive authority would seem to lie in the area of making specific decisions (to buy this or that bond) within the framework of the general policy. On the other hand, where the trust company's authority is more substantially limited, as where decisions on specific investments are made by the fund administrator or board after recommendations by the trust company, it is almost certainly true that the "decisions" are perfunctory ratifications of the recommendations. The likelihood is very great, in other words, that in the great majority of cases effective power to make specific investment decisions resides in the trust company or professional adviser (perhaps a stock broker or investment counsel retained by the fund); the fund administrator or board is likely to confine itself to the setting of the general policies.

II

In making the initial selection between an insured plan and one that is trusted or self-administered, employers and unions may be guided by a variety of considerations: for example, familiarity with the available alternatives, opinions as to degrees of risk involved, and attitudes on the desirability of retaining control over large sums of money. So far as one may judge from the explicit statements on the reasons for selecting one medium rather than another, yield and safety are the principal considerations—indeed, often the only ones.

Certainly, the individual employee's own interest lies in maximizing the yield on the contributions to the fund, consistent with safety of the investment. Where the pension benefit is expressed as a fixed sum based upon a specified number of years of service, the employee may

¹ *Comparative Regulations of Financial Institutions*. Committee on Banking and Currency, Subcommittee on Domestic Finance. 88th Cong. Subcommittee print. (Washington: Government Printing Office, 1963), p. 240.

be avowedly concerned only with safety, though he is likely to realize that the certainty of the full payment of the benefits after retirement will depend in substantial degree upon the success in attaining the actuarially-necessary yield on the contributions.

Many employers have evinced little interest in the control of the contributions and employer-trustees have often substantially abdicated their responsibility in the administration of ostensibly jointly-controlled pension plans, leaving matters largely in the hands of the union trustees. Presumably, such attitudes arise out of the notion that once he has made the contribution to the fund, the employer has no more concern with what happens to it than he would with an equivalent amount paid out as wages. This may be buttressed by the practical requirement of the Internal Revenue Code that the contributions to the pension fund are not subject to recapture by the employer except in the unlikely event that all obligations under the plan have been met in full.

Yet, the more thoughtful or sophisticated employer may be very much concerned with the success of the pension plan established for his employees. Non-contributory pension plans considerably antedate collectively-bargained plans, and considerations which impel employers to provide pensions for their non-bargaining unit employees exist also in respect to the organized employees. The failure of a plan to produce the intended retirement benefits is scarcely to be viewed with satisfaction, notwithstanding that the employer has made all the contributions contractually required by him. There is, moreover, an additional factor of great potential significance to the employer. Collectively-bargained pension plans have manifested a persistent tendency to enlarge the retirement benefits. Increases in the benefits necessitate large contributions to fund the past service benefits; sizeable increases in the pension will put the fund in a constant deficit condition with consequent pressures for larger employer contributions. Investment policies producing a greater yield than provided in the initial actuarial calculations may serve to cushion this impact, providing the enlarged benefits out of fund earnings rather than out of employer contributions.

As the bargaining representative of the employees, the union's interest in the success of the pension fund is obvious. Apart from the prestige it may gain from its participation in the administration of a fund which has done well, the union gains from the fact of a satisfied

membership; at least, it avoids the hazards of a disgruntled constituency faced with impairment in a major benefit. It is this last which perhaps explains the notable conservatism of union officials in the investment of union funds and their evident penchant for investing in government bonds.

III

If, as appears, those immediately involved in pension funds are interested in maximum yields and safety, though they may not agree on how much safety to give up for how much yield, what special investment questions exist in union pension funds? Without usurping the place of the speakers and discussants in this afternoon's session, I would suggest the following, among many others, as worthy of consideration: What types of securities are bought by the funds? Is there a preponderance of investment in federal bonds and other "Triple A" holdings? What is the role of equity investments? Are equity investments made in the "general run" of corporations or are they concentrated within a single industry and perhaps confined to a single company? Are such investments viewed as an instrument of potential union control or leverage within a company? Are they a *quid pro quo* for favorable treatment of the union by the company? Are investments confined to publicly held corporations? Are funds invested in union property: e.g., union headquarters? Are investments made in real estate equities? In mortgages? On industrial or residential property? On insured or uninsured bases? To what extent are pension funds invested in projects deemed especially socially-desirable: e.g., cooperative housing or vacation resorts for the membership? What has been the over-all performance of the funds, compared with, for example, insured funds? What lessons are to be learned from experience thus far with the funds? What public policy questions may arise if, in these or similar matters, one kind of decision is made rather than another; for instance to concentrate on the purchase of the securities of the employing corporation?

Our speakers will address themselves to some of these questions. Yet the subject is too large to be dealt with thus briefly; it is to be hoped that an increasing number of scholars will turn to research in this field and will shed light on important facets of an activity which affects millions of persons.

PATTERNS OF PENSION FUND INVESTMENTS*

H. ROBERT BARTELL, JR.

*United States Savings and Loan League and
University of California, Los Angeles*

Growth of pension fund assets has been rapid in recent years and projections for the 1970s and beyond reach several hundred billion dollars.¹ The size and potential growth of pension funds has given support to the idea that control of these assets represents enormous economic power.² Until now, this power has not been exerted in a coordinated fashion to further the interests of any particular group other than the beneficiaries of individual funds.

In the last few years, labor unions have made some tentative efforts to direct the investment of pension toward variously defined social goals. In most instances, corporate management has vigorously opposed union efforts to influence the investment of pension funds, especially in those funds where management has unilateral control over assets.

There are two broad categories of private pension plans subject to collective bargaining and thus amenable, in theory, to trade union influence. The first and largest of these categories is the single employer or corporate pension plan and the second is the less numerous multi-employer pension plan.

Corporate pension plans are typically administered by the sponsoring company although the funds accumulated to pay benefits are usually managed by a bank trustee or life insurance company. Assets of insured funds are comingled with those of the insurance company and their investment is regulated by state insurance laws. Control over these funds is effectively exercised by the insurer alone.

In most non-insured plans, ultimate control of investments rests

* Research for this paper has been supported by the National Bureau of Economic Research; Division of Research, Graduate School of Business, University of California, Los Angeles; and the United States Savings and Loan League.

¹ National Bureau of Economic Research, *43rd Annual Report*, May, 1963, p. 59.

² P. Harbrecht, *Pension Funds and Economic Power*, Twentieth Century Fund, (New York, 1959); A. H. Raskin, "Unions and Their Wealth," *Atlantic Monthly*, April, 1960; R. Tilove, *Pension Funds and Economic Freedom*, Fund for the Republic, (New York, 1959); A. A. Berle, *Power Without Property*, Harcourt Brace, (New York, 1959).

with the sponsoring company. Some companies, for example, General Electric and U. S. Steel, manage all aspects of their pension fund investment programs including day-to-day operations. Others, like American Telephone and Telegraph, use a bank as corporate trustee to make detailed investment decisions but place rather strict limitations on portfolio policy. Still other companies, and this is perhaps the largest group, give their bank trustee rather wide latitude as to policy and restrict themselves to periodic evaluations of overall performance.

A fairly large number of corporate plans are jointly administered by a board of trustees made up of equal numbers of employer and employee representatives.³ It is generally believed, however, that these cover employees of small companies and therefore have relatively little in the way of assets.

While the typical pattern for corporate pension funds is company control over investments, multi-employer funds are virtually all administered by a joint union-management board of trustees.⁴ In many instances, the joint board decides to delegate broad investment responsibility to a bank trustee in which case the pattern of investment management does not differ appreciably from most corporate funds. Nevertheless, a large proportion of the assets of multi-employer funds are held by trustees who take an active part in the investment operations of the fund. The important difference, then, between multi-employer and corporate pension funds is that the assets of the larger corporate funds are directly removed from direct influence by union members, beneficiaries or their representatives, whereas in the multi-employer funds, the union has a position of influence or control over investment policy which it can exercise or not as it chooses.

Unfortunately, the structure of pension fund administration does not lend itself to a very useful public discussion regarding the locus of investment control and the proper investment policies to follow. The battle over investment policy for corporate funds usually emerges during collective bargaining negotiations when the positions of both

³U. S. Department of Labor, Office of Labor-Management and Welfare-Pension Reports, *Characteristics of 163,500 Plans Filed as of July 1, 1965*, Table 4, p. 11. The figure for "joint employer-employee board of trustees" includes multi-employer plans which number about 1200 to 1500. Thus, approximately 5,200 to 5,500 out of more than 31,000 corporate pension funds are jointly administered.

⁴This in part reflects the fact that the Taft-Hartley Act requires a union-sponsored and employer-financed welfare or pension fund to be administered jointly by an equal number of employer and union trustees. Labor-Management Relations Act (Taft-Hartley), 1947, Title III, Section 302.

sides tend to be colored by public relations considerations. The discussion of investment policy for multi-employer plans is conducted privately in joint union-management trustees meetings and therefore is not in the public domain. Some discussion of the issues has cropped up at Congressional hearings on reporting and disclosure legislation, but, here again, the discussion of the broad issue of investment philosophy has been colored by the position of the parties on the specific legislation under consideration.⁵

The paper and comments to follow should help to clarify the positions of management and unions on these important issues of investment control and philosophy.

The purpose of this paper is to present data on the investment policies actually pursued by corporate and multi-employer funds as a background for the more philosophical discussion to follow.

INVESTMENT PATTERNS

One of the aspects of pension fund investment that has received greater recognition in recent years is that funds can have widely different investment goals and asset composition and still be managed wisely and prudently. During the 1950s, the standard formula seemed to be an ever increasing proportion of common stocks, especially of the "blue chip, growth type," and heavy reliance on marketable corporate bonds for the fixed income portion of the portfolio. In recent years there have been some departures from this formula, as portfolio managers have experimented with private placements, ownership of real estate and mortgage investment. Nevertheless, the formula is strongly reflected in the pattern of corporate pension fund investment as shown in Table I.

Since 1959, corporate funds have increased the proportion of common stocks in their portfolios by more than 10 per cent. In order to accomplish this shift, portfolio managers have placed more than 55 per cent of their new money in equities. Over the same period, the fixed income proportion of corporate fund portfolios has declined by 10 per cent with only the mortgage portion showing any growth.

The asset distribution of multi-employer and union funds exhibits

⁵ U. S. Congress, Senate, *Hearings before the Subcommittee on Welfare and Pension Plans Legislation*, 85th Congress, 1st Session, (Washington, 1957); and U. S. Congress, House, *Hearings before the Committee on Education and Labor on Proposed Welfare and Pension Fund Legislation*, 85th Congress, 1st Session, (Washington, 1958).

TABLE I
Portfolio Composition of Corporate Pension Funds 1959-1964
(Per cent of Book Value)

	1959	1960	1961	1962	1963	1964
Total Assets (Millions)	\$26,667	\$30,343	\$34,302	\$38,233	\$42,427	\$47,285
Cash and Deposits	1.6%	1.4%	1.5%	1.4%	1.4%	1.5%
U. S. Government Securities	8.5	7.1	6.4	6.2	5.7	5.2
Corporate Bonds	49.7	48.4	45.8	43.7	42.5	41.1
Preferred Stock	2.6	2.3	2.0	1.7	1.5	1.2
Common Stock	30.8	33.5	36.8	39.0	40.3	41.6
Mortgages	2.7	3.0	3.2	3.6	3.9	4.4
Other Assets	4.1	4.3	4.3	4.4	4.7	5.0

SOURCE: U. S. Securities and Exchange Commission, *Statistical Bulletin*, June, 1965.

somewhat similar trends during the same period. See Table II. Common stocks as a proportion of portfolio have grown by 9½ per cent while fixed income investments have declined 8½ per cent despite a sizable growth in the mortgage area. The distribution of new money is somewhat different with about one-third going into corporate bonds, three-tenths into stocks and one-fourth into mortgages.

Despite similar trends over the past half decade, the portfolio composition of multi-employer and union funds today is still substantially different from corporate funds. In part, this reflects differences in investment philosophy; in part, it represents different needs.

NEED FOR LIQUIDITY

Multi-employer funds have a greater need for liquidity and stability of income because of the absence of a benefit underwriter. In the

TABLE II
Portfolio Composition of Multi-Employer and Union Pension Funds, 1959-1964
(Per cent of Book Value)

	1959	1960	1961	1962	1963	1964
Total Assets (Millions)	\$1,270	\$1,548	\$1,856	\$2,209	\$2,601	\$3,040
Cash and Deposits	6.5%	5.2%	5.5%	6.1%	6.5%	6.2%
U. S. Government Securities	34.0	26.1	21.0	18.6	16.0	14.8
Nongovernment Bonds	28.0	31.5	32.1	31.7	31.9	31.8
Preferred Stock	1.7	1.8	1.6	1.4	1.2	1.0
Common Stock	14.0	17.5	20.4	22.2	22.4	23.5
Mortgages	12.3	15.1	16.4	17.0	17.9	19.2
Other Investments	1.4	1.2	1.2	1.4	2.5	1.9
Other Assets	2.1	1.7	1.7	1.6	1.6	1.6

SOURCE: National Bureau of Economic Research study by author.

typical corporate plan, the company agrees to pay a given level of benefits to retirees. If contributions are insufficient to pay such benefits, the company is obligated to increase its contributions. If cash needs of the fund temporarily exceed its resources and a depressed market makes it inadvisable to sell securities for cash, the company can provide liquidity from its own resources.

Multi-employer funds, by contrast, are supported by negotiated payments based upon employment or output,⁶ and participating companies are not obligated to increase payments to help the fund over periods of illiquidity. If a strike or employment decline occurs, contributions are automatically reduced. At the same time, benefits frequently rise as laid-off workers eligible for benefits choose to retire.

In addition to greater precautionary needs for liquidity, multi-employer funds typically require larger amounts of cash for transactions purposes since most of the costs of administering the system are paid directly out of the fund. For the corporate fund, by contrast, the costs of record keeping, payment for professional services and personnel are paid directly out of the company's accounts rather than from the fund.

A further factor accounting for the greater liquidity of multi-employer funds is the smaller average size of these funds when compared with corporate funds. Table III shows that 13.8% of corporate

TABLE III
Concentration of Assets in Corporate and Multi-Employer
and Union Pension Funds
(Per cent of Total)

Size of Fund (thousands of dollars)	Corporate Funds (1957)		Multi-employer and Union Funds (1959)	
	Number of Funds	Total Assets	Number of Funds	Total Assets
100,000 and over	1.5%	55.3%	0.0%	0.0%
10,000 to 99,999	12.3	28.3	3.8	53.6
5,000 to 9,999	9.1	6.0	2.6	8.1
1,000 to 4,999	25.5	6.9	26.9	29.4
500 to 999	13.0	1.2	13.3	4.3
Under 500	38.6	2.3	53.4	4.6

SOURCES: Corporate Funds, SEC data, calculated from P. P. Harbrecht, *Pension Funds and Economic Power*, Table 30, p. 224. Multi-employer and Union Funds, NBER Survey.

Assets are recorded at book value.

⁶U. S. Department of Labor, Bureau of Labor Statistics, *Multi-employer Pension Plans under Collective Bargaining*, Bulletin No. 1326, (Washington, June, 1962), pp. 12-15.

funds had over \$10 million in assets in 1957, and these funds held 83.6% of total corporate fund assets. Less than 4% of the multi-employer funds had more than \$10 million in 1959, and none had more than \$100 million. The \$10 million and over size class held just over one-half of total multi-employer assets.

The smaller funds tend to have a higher proportion of their assets in cash as shown in table IV.⁷ Thus, a higher concentration of smaller funds in the multi-employer group means a higher proportion of cash for the group as a whole.

If cash holdings are a function of the size of the fund, the proportion of cash in multi-employer funds should have declined since 1959 as the funds grew. Such a clear trend does not emerge. However, it should be recognized that the item "cash" on the Labor Department reporting form includes savings deposits, certificates of deposit and accounts at savings and loan associations.⁸ The yields on these types of "cash" have increased substantially since 1959, and higher yields, plus liquidity, plus insured safety have undoubtedly encouraged funds—both corporate and multi-employer—to maintain their proportional holdings.

TABLE IV
Portfolio Composition of Multi-Employer and Union Pension Funds,
By Size of Fund, 1959
(Per cent of Book Value)

Assets Per Fund (In Thousands)	\$10,000 and over	\$5,000 to \$9,999	\$1,000 to \$4,999	\$500 to \$999	Under \$500
Cash	3.4%	6.2%	6.9%	17.0%	31.7%
Other Assets	1.7	2.4	3.0	2.3	3.2
Invested Assets	94.9	91.4	90.1	80.7	65.1
Government Securities	38.7	25.4	30.3	24.7	24.9
Nongovernment Bonds	20.1	45.4	37.8	35.5	20.0
Preferred Stocks	1.7	2.2	1.9	1.2	0.9
Common Stocks	12.1	14.5	17.0	17.4	12.2
Mortgages	20.8	3.6	2.5	0.4	0.9
Other Investments	1.4	0.3	0.6	1.6	6.2

SOURCE: NBER Survey.

⁷ The same observation holds for corporate funds. See Harbrecht, *op. cit.*, Table 17, p. 203.

⁸ U. S. Department of Labor, *Instructions for Completing Employee Welfare or Pension Benefit Plan Annual Report*, January, 1959, p. 5. A proposed new reporting form which should go into effect next year requires savings accounts to be reported separately.

OTHER ASSETS

A number of multi-employer funds use an accrual basis for accounting and therefore show a balance sheet item of "contributions receivable." For most funds, this represents approximately one month's contributions. In some instances, however, the funds have been lax in pressing for collections and employers have withheld contributions because of disagreements over the amounts due or because their own cash resources were thin. Contributions receivable and furniture and fixtures together represent the bulk of the "other assets" category for multi-employer funds. These assets would not usually appear on the balance sheet of a corporate fund since the company does not have contractual contributions which must be accrued, and it typically administers the pension fund on the premises and using the facilities of the company.

A comparison of the investment portfolios of multi-employer and union and corporate pension funds is more meaningful if the categories of cash and other assets are left out.

ATYPICAL FUNDS

The large pension funds of the Teamsters, International Ladies Garment Workers Union, International Brotherhood of Electrical Workers, Amalgamated Clothing Workers and United Mine Workers are clearly not typical of the investment portfolios of the great majority of multi-employer funds. Both the ILGWU and the Clothing Workers funds make no investments in common stocks, and until 1962, the ACW funds were invested entirely in U. S. Government bonds. In 1962, the Clothing Workers funds began to add corporate bonds, and in 1963, they initiated investment in mortgages. However, over one-half the assets of the two largest ACW funds are still invested in government bonds.

The two largest IBEW funds and the Teamsters' largest fund are heavy investors in mortgages and over two-thirds of their assets are held in this form. The United Mine Workers fund has shifted its investment position several times in the last five years. From a heavy reliance on U. S. Government bonds in the earlier years, the fund shifted to large holdings of cash and time deposits. Since the sale of its hospitals during 1963 and 1964, the fund has more than doubled its holdings of common stocks.

These eight funds are among the largest of the multi-employer and

union group and together they hold about \$800 million in assets, or over one-fourth of the total assets of this type of fund. That they are untypical of the general pattern of multi-employer fund investments is evident from table V. This shows the portfolio distribution of the eight atypical funds and all other funds—called “selected funds.”

Table VI represents a better comparison between the typical multi-employer fund and corporate fund investment patterns. The cash and other assets have been eliminated from both types of funds because of the noncomparability of these categories. In addition, the atypical funds have been excluded from the comparison.

Despite these adjustments to achieve comparability, substantial differences in portfolio distributions still remain although they are no

TABLE V
Portfolio Composition of Atypical and Selected Multi-Employer
and Union Pension Funds, 1964
(Per cent of Book Value)

Asset Category	Atypical Funds	Selected Funds
Total Assets (Millions)	\$799	\$2,241
Cash	10.0%	4.9%
U. S. Government Securities	19.1	13.3
Nongovernment Bonds	10.7	39.3
Preferred Stock	0.4	1.2
Common Stock	8.0	29.0
Mortgages	46.9	9.3
Other Investments	3.5	1.4
Other Assets	1.5	1.6

SOURCE: NBER Survey

TABLE VI
Investment Portfolios of Selected Multi-Employer and Union
and Corporate Pension Funds, 1964
(Per cent of Book Value)

Investment Category	Corporate Funds	Multi-employer and Union Funds
U. S. Government Securities	5.3%	14.2%
Corporate Bonds	41.8	42.1
Preferred Stock	1.2	1.3
Common Stock	42.2	31.0
Mortgages	4.5	10.0
Other	5.1	1.5

SOURCE: Corporate Funds, calculated from SEC data; Multi-employer and union funds, NBER Survey.

longer as large. Some of the differences are undoubtedly attributable to the influence of union trustees on the boards of multi-employer funds.

MORTGAGES

The clearest case of union influence is in the area of mortgage investments. During 1960, the AFL-CIO established an investment department whose principal objective was to aid affiliates in investing

“... a portion of union reserves into government insured housing programs to improve the earnings on their investments while at the same time advancing a major social objective of the labor movement—to assure the availability of adequate housing for low and middle-income families.”⁹

In addition to advising union officials on the desirability of government insured mortgages, the department has established a Mortgage Investment Trust to facilitate such investments.¹⁰ The success to date of these programs is indicated by the increasing proportion of mortgages in multi-employer pension fund portfolios as well as the figures shown in table VII. Of the 87 large funds in the sample used to estimate portfolio distributions, the number holding some mortgages almost doubled from 1959 to 1964. However, the figures also show that a large number of funds remain to be convinced of the advisability of mortgage investments.

The low proportion of mortgages in corporate pension fund portfolios is explained by (1) the traditional preference of fund trustees,

TABLE VII
Number of Multi-Employer and Union Funds in Sample
Holding Selected Types of Assets, 1959-1964

	1959	1960	1961	1962	1963	1964
Total Number of Funds in Sample	87	87	87	87	87	87
Total Number of Funds Holding:						
Mortgages	27	32	33	41	49	50
Common Stock	66	68	68	69	70	70

SOURCE: NBER Survey.

⁹“Investment of Labor’s Funds,” Publication No. 130, AFL-CIO, Department of Investments.

¹⁰The Trust reportedly had \$10 million in commitments as of a recent date. *Wall Street Journal*, December 21, 1965, p. 1.

namely bank trust departments, for marketable securities, and (2) the amalgam of legal and technical impediments to mortgage investments which can reduce their net yield below that on corporate bonds.¹¹ Either the multi-employer trustees have discovered some means of removing these impediments, or they are willing to accept a lower yield to achieve a "social purpose."

COMMON STOCKS

Although multi-employer and union funds hold a substantially smaller proportion of their assets in common stocks as compared to corporate funds, this type of investment has fairly wide acceptance. About 80% of the large funds in the multi-employer fund sample held some common stocks, as compared with 57% holding mortgages. While I know of no comparable figures for corporate funds, I would guess that the proportion holding some common stocks is higher.

While the lower percentage of stocks in multi-employer funds is partly attributable to reluctance on the part of a few funds to hold any stocks, it is probably also explained by the reluctance of other fund trustees to expand their stock portfolio rapidly. Several investment advisers have explained to me that the relative inexperience of many multi-employer fund trustees in investment matters inhibits them from moving aggressively into larger stock holdings.¹²

These advisers point out that investment inexperience is characteristic of many management as well as union trustees.

CONCLUSION

My purpose has been to put before this meeting the data on pension fund investment patterns along with several reasons why these patterns differ for funds that are management controlled from those where unions share control. Clearly, there are still a good number of unexplained differences left. These remaining differences reflect, I believe, the varying investment philosophies of labor and management. This is the subject of the paper and comments to follow.

¹¹ Victor Andrews, "Non-insured Corporate and State and Local Government Retirement Funds in the Financial Structure," *Private Capital Markets*, Commission on Money and Credit, Prentice Hall, Inc., 1964.

¹² This is confirmed by F. Meyers and C. R. Miller, "Investment of Bilaterally Managed Pension Plans," *Quarterly Review of Economics and Business*, February, 1962.

MANAGEMENT INTERESTS IN THE INVESTMENT OF PENSION FUNDS

ROGER F. MURRAY
College Retirement Equities Fund

THE READILY IDENTIFIABLE ECONOMIC INTEREST

A pension fund, whether it takes the form of a trust fund or life insurance company assets, serves two distinct purposes. In the first place, it is a bundle of collateral pledged for the fulfillment of the commitments for retirement income made by employers to their employees. As such, it must not be used to finance the employer's operations or development objectives. Secondly, it is a medium for distributing the costs of the commitments over the period during which they are incurred. The pension promises are seldom fully collateralized at any particular point in time and the effort to estimate the true current costs of ultimate pension benefits may be only an approximation, yet the purposes and functions of a fund of financial assets are clearly evident.

The prospective earning power of the portfolio is, of course, a primary determinant of the adequacy of the fund to serve as collateral and of the rate of contributions to meet future expenses. A basic concern of management, then, must be with assets committed to funding pension obligations. Book values of assets on hand in a pension fund are unlikely to be indicative of adequacy. Market or appraised values may be presumed to provide a better indication if, in fact, they correctly reflect the discounted value of the future stream of income which the assets will produce. Portfolio management, of course, questions this presumption and seeks gains rather than losses from those erroneous expectations which are expressed in market prices at any point in time. The case for equity investment specifically rests on this concept of portfolio management.

The primary objective of management, therefore, is to secure that selection of investment opportunities which will maximize future returns and minimize the costs of retirement benefits within the range of acceptable risks. Acceptable risks may be defined according to characteristics of the organization and factors affecting the environment for long-term investments. In this respect, the problem is similar to decision-making on investments in plant and equipment, human skills, and research and development.

Thus, we can recognize the many similarities between management's interests in the investment of pension funds and management's interests in the whole range of human, financial, and real resources which constitute a business, a non-profit institution, or a unit of government. It comes back to the familiar concept of seeking the most efficient allocation of scarce resources to achieve a goal. Stated in these economic terms, is there room for any other consideration? Is there any test of success other than efficiency and productivity as these are measured by net return on investment? In more specific terms, should the board of directors of an industrial corporation, the trustees of a jointly administered multi-employer pension fund, the trustees of a church pension fund, or the board of a state employee retirement system apply any other standards to their formulation of investment policy and instructions to the portfolio manager or insurer?

This question is as broad as our concepts of social responsibility and the workings of our American system of economic and political organizations. It may be fruitful, therefore, to narrow the range of issues to those specifically raised in the investment of public and private pension funds. Indeed, three lines of argument should serve to illustrate the complexities which face employers when they seek to weigh considerations beyond those strictly related to monetary returns on investments.

OTHER POSSIBLE INTERESTS

1. *The Well-Being of Pensioners*

Since the objective of providing pensions is to improve the level of living of retired employees, projects which contribute to the well-being of older people should be favored in pension fund investing to the extent of accepting a lower prospective return on the investment. This argument for investing in hospitals, housing for the aged, nursing homes, etc. at below-market rates suggests that providing such facilities is a cost of assuring the desired standard of living, as distinguished from simply the money incomes of retired employees.

The argument can be readily extended to concern over the purchasing power of the pensioners' benefits. Investments which promise a high return should not be made when they contribute to tolerating or generating inflationary pressures in the economy. On the contrary, the pension fund portfolio manager should examine investment opportunities to make certain that they make a maximum contribution to productivity and price stability. In even broader terms, investment

should be directed to projects which offer promise of reducing the cost of food, housing, clothing, medical care, and other services which bulk large in the budgets of older people.

2. *"Socially Desirable" Projects*

A second issue relates to the public interest aspects of pension funds arising from the fact that neither employers' contributions to a systematic plan nor fund earnings are taxed to prospective pensioners until they retire. Thus, as a matter of deliberate public policy, favorable tax treatment is given to pension programs. The resulting public interest, it is argued, calls for directing the investment of these tax-sheltered accumulations into the financing of what are called "socially desirable" projects. Often mentioned are middle- and low-income housing, urban renewal, health facilities, and the like. Such projects are presumed to give a return to society for the deferment of taxation on the pension equities of individuals.

Again, the issue is whether a lower prospective return should be accepted in order to further the social purposes which such projects are designed to serve. If the return, adjusted for a risk premium, is not less than the market rate, of course, there is no issue because market forces alone will insure that financing will be forthcoming.

3. *Community Development*

The trustees of a governmental retirement system, state or local, are often pressured to invest in their geographical area. Funds drawn from the community might logically be reinvested in its industrial and public projects to stimulate growth in the revenue base. The same arguments can be advanced to the managers of corporate pension funds, despite the fact that considerations of safety would dictate diversifying the portfolio to improve its value as collateral.

The implicit assumption is presumably that rigidities and imperfections in the capital markets impede the free flow of funds to the most productive investment opportunities. Local knowledge of, and concern for, the area are presumed to break down the barriers of ignorance and prejudice. In any event, favoring the local economy may improve it as a base for operations and as a community for retired employees.

IMPLICATIONS FOR INVESTMENT POLICIES

If management accepts the notion of seeking to serve any or all of these objectives at the expense of maximizing the return from conven-

tional investments, what new problems are posed? One is simply a problem in costing, because the contribution to a social or community purpose becomes mingled with an employment cost. After a while, management will have increasing difficulty in assigning costs to the specific functions of its undertaking.

More significant, however, is the placing of management in the position of arbiter among competing claims of social desirability. Not only is this an involved and difficult task for those not necessarily well qualified to make these decisions, but also there is a basic question as to whether managements should be encouraged to assume decision-making responsibilities in this area. We usually assume that the people at large, acting through their elected representatives, should determine the priorities for projects which they favor for the benefit of society.

Furthermore, we have found ways to make worthwhile projects competitive for capital in the marketplace. FHA and VA mortgage programs, guaranteed ship loans, farm credit instruments, small business loan guarantees, and the insurance of export credits are illustrations which come readily to mind. Through such governmental programs, citizens influence resource allocation through the normal operations of the capital markets. Pension funds respond to these influences in the process of a strictly economic appraisal of investment opportunities.

In summary, we may be calling upon the best talents of managements when we ask them to concentrate on the economic aspects of investment decisions, the field of their expertise. On the other hand, to expect that managements, whether holding office in business firms or governmental units, will be equally qualified to decide between contending social objectives comes dangerously close to embracing the sweeping dictum that what is good for Company X is good for society. Also, it is difficult to set boundaries on the range of considerations in investment decisions once we depart from an economic base.

A FALSE ANTITHESIS?

However, this type of analysis should avoid the presentation of a false antithesis. Investment decisions, dealing with an uncertain future affected by more than purely economic influences, involve more than mathematical calculations. A good investment which contributes to efficiency and new product development serves to raise living standards. Innovation and technological change are wellsprings of progress. There

are few pension fund investments which do not, in fact, rely on widespread public acceptance of the product or service of the organization being financed. Put another way, socially unacceptable activities do not attract long-term investment funds from institutional investors like pension fund trustees and insurers.

The real questions arise, therefore, at the margins in the decision-making process. If managements continue to focus their efforts and attention on maximizing returns in reasonably fluid and efficient capital markets, the results will certainly contribute to our desired goals of economic growth and rising standards of living. At least, we appear to be on more solid ground in this expectation than if we look to managements to influence decisions on the basis of often subjective, debatable, and preconceived notions of social desirability. Finally, the high quality of trusteeship required for pension funds can be better sustained and enforced if the tested yardstick of the prudent man rule is the sole applicable standard.

PETER HENLE

Bureau of Labor Statistics

Private pension plans can no longer be considered simply a "fringe" element in the Nation's economic security system, one that can be allowed to travel its own merry way without involving either private or public examination of its conduct.

It is symptomatic of the new interest in private pension plans that this session is being held. A few years ago, this would not have been considered as a possibility for the annual meeting. There is growing recognition that what happens in operation of private pension plans is of interest, and has to be of interest, to labor and management organizations, to the investment fraternity, and among others, to the Federal Government.

This afternoon's discussion has revolved around the investment decisions of private pension plans. Mr. Bartell has very competently traced for us the changing composition of the portfolios for both the single employer plan and the funds managed by a joint union-management board of trustees. Unfortunately, data have been readily available only for the single employer plans, and it is to the credit of Mr. Bartell and the National Bureau of Economic Research that he initiated a survey to collect similar data for the jointly trusteeed plans. It is to be hoped that these data will now be made available on a continuing basis, either through his efforts or by incorporating this work with the established Government data in this field.

Dr. Murray's paper, up to his usual high standards, gives us a closely reasoned discussion of some of the critical issues which confront the investment manager in charge of a private pension fund. To what extent, if any, can or should such a manager be guided in his decisions by considerations outside the traditional "prudent man" doctrine? Dr. Murray counsels against any departure from this principle to invest in projects specifically designed for the elderly, in other types of so-called "socially desirable" projects, or in projects for community development. While I am inclined to share his adherence to this basic principle, I wonder if he is not creating a major issue out of a minor disagreement. Some projects meeting the criteria of "socially desirable" may be soundly conceived and thus qualify for investment by the prudent investment manager. However, they may appeal to some investment managers but not to others. It seems to

me that the argument over "socially desirable" projects is, to some extent, simply a disagreement over the financial merits of specific projects or types of projects. Essentially it involves an effort by some to persuade others that these projects meet Dr. Murray's criteria that "the return, adjusted for a risk premium, is not less than the market rate."

There is another aspect to the problem of gaining adherence to the prudent man doctrine. Dr. Murray has suggested three types of situations in which the investment manager might be asked to invest pension funds in order to help other people or the community at large. I want to call attention to situations in which the investment manager may make investment decisions, not to benefit others, but to benefit himself or his corporation rather than keeping uppermost the welfare of the employee participants of the pension plan.

I do not contend that this is characteristic of pension fund management; obviously, it is NOT. But, from time to time, evidence reaches the public that certain pension funds have been managed in a manner which flagrantly violates the traditional rules of fiduciary responsibility. There have been situations in which the pension or profit-sharing fund has been used 1) to support the market for the corporation stock during a period when the corporation trustees were disposing of their personal shares, 2) as a vehicle for corporate acquisitions and real estate transactions in which the corporation is directly involved, and 3) to provide additional capital to the concern by committing a major portion of the fund to loans or purchases of employer securities.

These transgressions may not be numerous but they raise serious questions of public policy since these plans are benefiting from favorable tax treatment. Moreover, it appears that although these funds are managed under trust arrangements, the applicability of the common law on trusts to pension fund situations is not a simple matter. I am told there is a great deal of uncertainty whether, and to what extent, participants (particularly those without vested rights) have enforceable rights against the plan or its administrators. Under these circumstances, there is no recognized or easily accessible method for correcting transgressions of the prudent man principle. This matter is of considerable concern to all interested in assuring the highest standards of fiduciary responsibility for private pension funds.

LEON T. KENDALL
New York Stock Exchange

My colleagues have examined the issues regarding pension fund investment policy. The problem explored by them, in an important respect, comes close to the question, "Which comes first, the chicken or the egg?," the chicken being the assets available for purchase by pension funds and the egg being the investment decisions of the fund managers. Mr. Goldfinger's position implies that "the egg comes first." Dr. Murray has said, "It all depends." In order to complete the alternatives, and perhaps to lean against the wind a bit, I am going to say, "The chicken comes first";—that is, the assets the economy makes available for purchase by pension funds will in the long-run be the principal determinant of the character of the portfolio of these financial institutions.

Studies underway at the Exchange indicate: (1) A definite relationship exists between the size and growth of the gross national product and the size and growth of public and private debt; (2) The mix of financial assets the United States economy makes available to investors does not remain fixed for a very lengthy period of time.

On point number 1, a given level of business activity generates related financial flows. This is one of the "patterns of regularity" that seems to run through in our economic history. The rationale behind the "pattern of regularity" between GNP and debt in the economy runs as follows: Individuals with wealth typically seek to use their capital to earn additional income. Other Americans, being optimistic, characteristically have been willing to mortgage the future, especially in situations where it was possible to substitute capital and machines for animal muscle. Debt instruments came into being, then, because of the needs and desires of holders and seekers of capital.

The additional debts created are the assets available for purchase by savers either directly or via the network of financial intermediaries. Most of the nation's personal saving flows into banks, savings associations, insurance companies and other thrift institutions. The financial intermediaries, with minor exceptions, invest such funds in assets which are the debts of others—mortgages, bonds and short-term loans. If the economy is to maintain its rate of growth, the saved consumer dollars must be acquired by others and spent. It is through this process that debts are created.

A high-saving economy, such as the NICB foresees, should also prove to be a high-debt economy.

Available data on public and private debt go back to 1920. In comparing the trend in debt over the long-term with the trend in GNP, we find a very close relationship, particularly when the 1930's are removed. For each \$1.00 of GNP over this time period, one can expect \$1.75 of debt to exist. This is the average relationship that prevailed between 1920 and 1964, excluding the 1930's. (Current concern over the quality of credit may well reflect the fact that since 1961 the debt/GNP ratio has been running ahead of its long-term trend. In 1964, it stood at \$1.86 for each \$1.00 of GNP.)

Although total debt is highly predictable, the composition of debt is not. Consumer, business and government demands can change, and change quickly, altering the makeup of total debt.

Between 1940 and 1945, when there was a war to finance, federal debt rose from 21% to almost 55% of net public and private debt. In the same period, with restrictions on construction and on building materials, corporate long-term debt declined from 24% to 11%. Mortgage debt also shrunk, 8% to 6%. Financial institutions bought government bonds.

Between 1950 and 1955, demand for autos and appliances and home furnishings boomed. Consumer installment debt rose sharply. Consumer credit departments of banks grew. Sales finance companies prospered.

Also during the 1950's, we experienced a sharp rise in home building and in home mortgage debt, and great growth in institutions closest to this market sector. More recently, the gains in housing and home mortgage debt have slowed and savings and loan associations are experiencing the consequences.

Thus, there is evidence that the investment portfolios of financial institutions over the long-term will reflect the change in the kinds of debt instruments the economy generates. In other words, financial institutions will buy the kinds of financial assets consumers, business firms, and governments make available through the debt they are willing to float. In this sense, the chicken comes first.

When a financial institution is relatively new, growing rapidly and finding its place in the financial framework, the processes I have described may be hidden from view. With maturity, however, the reality of these forces may well become more evident. There are signs that

pension funds are reaching such a stage. The inclusion of the topic on the program on this meeting in itself is indicative of this fact. Investment policies and decisions made previously and sometimes written into bylaws are undergoing review. Inflows into pension funds should continue to grow in absolute amount, but, relatively, growth will come more slowly during the years ahead. Outflows from pension funds will tend to grow in absolute amount *and* relatively more swiftly during the years ahead. More and more pension fund managers may learn from direct experience that the investment business is a risk business; that not all loans and mortgages pay off; and that not all equity investments inevitably rise. Furthermore, losses are not likely to be evenly distributed over the industry. The performance of some funds is destined to run ahead of the performance of others.

The table below indicates the relationship of purchases of equities to sales of equities by funds. It may be used as an illustration of the evolution taking place among pension funds.

Pension Fund Equity Investments Ratio of Purchases to Sales*

1956-58	5.3 to 1 in favor of purchases
1959-62	3.6 to 1 in favor of purchases
1963-64	2.2 to 1 in favor of purchases

* SEC data on corporate pension funds.

Between 1956 and 1964, over-all turnover of fund portfolios continued to be approximately 11%. Purchases, as a per cent of total holdings, however, declined from the 19%-20% range to 14%-15%. Sales, as a proportion of total holdings, rose from approximately 3½% to over 6%. Shifts in the investment portfolios were taking place.

For an individual fund, the development of a sizeable position in a particular stock raises additional questions not faced previously. How important is liquidity? Can the fund move out of a position quickly? Does the fund run the risk of having the size of its trade in itself jeopardize the price it can get for the security?

The experiences of other institutions that have moved through periods of rapid growth offer valuable counsel regarding portfolio management for pension funds. The maximizing course over the long-run, it seems to this observer, is to refrain from mixing sociology with the financial decision-making process. The most appropriate course is to study the economy, its trends and potentials, and to adhere to a reasonably prudent-man philosophy in deciding what kinds of eggs to buy from that chicken.

X

LABOR HISTORY

Irving Bernstein, Chairman

SOME PROBLEMS IN THE WRITING OF LABOR HISTORY

HERMAN KAHN

National Archives and Records Service

It is a peculiarity of historical research and writing as practiced by academic historians in this country that there has been no essential change in the techniques taught and used by practicing historians since the methods of the German universities were adopted in this country almost one hundred years ago. There is no other subject taught in our universities of which it can be said, as it can be said of the teaching of history, that a student plucked today from a graduate seminar in historical methodology in one of our great universities and put down in one of the seminars in history being conducted in the 1880's at Johns Hopkins or at Columbia University would feel perfectly at home. The basic concepts imported from the German universities and then being taught in this country with respect to techniques and methodology of historical research, as well as the concept of the nature of raw materials on which the historian should exercise these techniques, are now very much as they were then.

But if the theory and practice with respect to research techniques and the raw materials on which these techniques are to be used have remained largely unchanged, there has taken place in the past generation a gradual introduction of new subjects of interest to the historian. Hence the dilemma that faces the labor historian in this country is precisely the same dilemma that faces historians who are trying to practice their art in a whole host of new fields—it is the dilemma that arises from the attempt to continue the use of the research techniques and raw materials of the past to create the new kind of history that is being written today, including American labor history.

One hundred years ago, as today, historians were telling each other that what was needed was the writing of institutional history. Unlike the situation today, however, they then knew perfectly well what they meant by institutional history. Parliaments, courts, legislatures, constitutions, magistrates, jury systems, taxation, suffrage, organs of local government—these things were institutions, and these were the subjects to which graduate students in history and historians largely confined their attention. The training of historians was inevitably aimed at

producing scholars capable of grappling with such subjects. By and large, the method of training has remained unchanged, but the young men who have been flooding into our universities since the 1930's have become interested in the application of their training to subjects that their forebears rarely, if ever, thought about when they thought about historical writing. Today, although many students continue to be interested (and rightly so) in the traditional areas to which historians have devoted their attention, many others talk of business history, agricultural history, transportation history, history of immigration, history of science, history of education, history of conservation, history of ideas, history of invention, history of banking, histories of folk customs and folklore, and, as one young man who came to the National Archives several years ago told us, he was writing a history of door knobs. And, of course, there is the subject with which this group is concerned—the history of labor. The essential point is that nothing is now excluded from the purview of the historian. History has now become a seamless web in a sense of which Maitland did not dream.

As a result of this concept that there is no field or area that is not a proper subject for historical investigation, all of these new subject fields are now plagued by problems of definition, as every new discipline always is. I am sure that you know that historians of agriculture, science, business, transportation, immigration, and conservation are just as uncertain as to the boundaries of their fields as are labor historians, and the same kind of worrying and chewing of this subject of definition that goes on in the field of labor history is occurring in all the other new fields of historical investigation.

In a peculiar way, this question of definition has, it seems to me, become central to the question of the present status and future development of labor history in this country. It is my belief that this question of definition is closely related to the matter of the training of historians that I spoke of a few moments ago.

In the introduction to his *The Lean Years*, published in 1960,¹ Dr. Irving Bernstein pointed out that the field of labor history in this country had been largely preempted by economists, and that the writing of what is called labor history had, up to that point, been confined almost entirely to the history of trade unions, or, if you will, histories of the labor movement.

¹Irving Bernstein, *The Lean Years* (Boston: Houghton Mifflin Co., 1960), p. IX.

I think that it is fair to say that economists no longer dominate this field as completely as they formerly did. The founding of the new quarterly, *Labor History* in 1960 signaled the heavy infiltration into this field of men whose primary training has been in the field of history, not economics. What is interesting, however, is that the influx of historians into the field of labor history, has, if anything, strengthened the rather narrow focusing of interest by labor historians on the history of *organized* labor, or of the labor movement, of which Bernstein complained.

It seems to me that the chief reason for this lies in the kind of training in research technique that professional historians receive. They are taught that there can be no history without documents, and by documents they still mean, for the most part, the documentation created by those formalized institutions in our society which produce certain kinds of documentation as a by-product of their existence.

The most prolific producer of organized documentation of this kind, of course, is government. Labor was not one of the major matters to which government began to confine its attention until the last decades of the nineteenth century. Then, for the first time, government began to produce on the subject of labor the kind of documentation with which the historian, and, I may add, the economist, feels most at home. They know how to find and use legislative debates, laws, resolutions, court decisions, decisions of administrative and regulatory agencies, and office correspondence files. Similarly, labor itself produces the kind of documentation that historians can find their way around in only when it *organizes*—then it produces minutes of meetings, resolutions, speeches, labor newspapers, and office files—the kinds of raw materials from which labor history has thus far been written in this country.

What I am suggesting is that the boundaries of the field of labor history as they have been largely laid down in this country have been governed by the unconscious assumptions of historians who have entered that field as to the source materials that must be used in writing history. The definition of labor history that has flowed from these assumptions, has, not unnaturally, omitted those whole vast areas and periods in our history when labor was not a matter of governmental concern, and when labor (or the working classes) have been unorganized. Being unorganized, they were largely inarticulate insofar as a written record is concerned.

This is not a problem that is unique to labor history. American

historians became aware more than a generation ago that what had been written for the preceding 300 years on the history of the American Indian was hardly a history of the Indian at all, because it had been written entirely from records kept by those white men who had dealings with Indians. White men and their governments kept formal written records. Indians did not. Hence, what had been written was a kind of one-eyed history, seen entirely from a single and special point of view. But if the histories of the American Indian were vitiated by the lack of formal written Indian records, it was at least recognized that Indian history did exist. This was because our governments had been interested in and concerned with Indians from earliest colonial times, and these governments had produced records. Encountering these records in the archives, historians had decided that Indian history was a subject worthy of investigation.

The working classes of this country are in worse shape than the Indians as far as the writing of their history is concerned. When unorganized they produced no records recognizable as such by historians, and, unlike the Indians, labor was not an important subject of legislation, negotiation, and administration until comparatively recent times. Hence historians do not begin to recognize labor history as a subject until they begin to encounter that subject, labeled as such, in the archives, and they still largely define the boundaries of labor history as these boundaries are laid down by the content of formal archival materials.

This hypothesis can easily be tested. Prior to the rise of organized labor in this country, there was only one labor institution that was the object of extensive governmental attention and regulation. This was, of course, the institution of slave labor. Finding a wealth of formal documentation on the institution of slavery, historians have written about it extensively, though it is remarkable that so few historians identifiable as labor historians have investigated slavery, and I can attribute this only to the fact that slave labor was unorganized labor.

Almost coterminous in time with the rise and fall of the institution of slavery in this country was the all-pervasive institution of the indentured servant. This important institution, also central to an understanding of American labor history prior to the middle of the nineteenth century received little governmental attention, certainly not from the Federal government, and the indentured servants had no organizations. Few labor historians have paid much attention to the indentured servant.

Examples can be multiplied. The period between 1815 and 1850 was the great canal-building era in this country, the period when a vast network of waterways was dug, especially in the north. We have studies of the engineering problems encountered by the canal builders, studies of how they were financed, studies of the competition between canals and railroads for state and Federal assistance, and studies of the economic competition between canals and railroads. But these canals were dug by large armies of pick and shovel workers. What historian—particularly what labor historian—has investigated this important aspect of American labor history, or has given us answers to such questions as, who were these canal diggers? How were they recruited? How much were they paid? How were they fed and housed on the job? It is, I think, significant that the only piece of research published in a major historical journal that has appeared on this subject is confined to an incident which involved canal diggers with the Federal government—the calling out of Federal troops by President Andrew Jackson in 1834 during the strike by the men digging the Chesapeake and Ohio canal.² This situation is closely paralleled in railroad history. We know much about the early history of railroads, except for the workmen who built them. The historian does not become interested in that story until the Western railroads began to import Chinese contract labor, which became a matter of interest to the Federal government.

Again, American literature is permeated with descriptions of a unique American labor institution—the hired man on the American farm. What labor historian has written of the institution of the hired man? It is again significant that only when agricultural laborers organized and became the subject of governmental attention does the labor historian become interested in the agricultural laborer. Precisely the same situation exists with writing the history of American merchant seamen. Most of what we know of the working crews that manned the vessels of the American merchant marine during the age of sail is what we learn from the novelists and folklorists who have written of that era. The labor historian's interest begins only with the enactment of Federal legislation to protect merchant seamen and with the organization of their presently strong and powerful unions.

This persistence of the labor historian in ignoring important working classes of the past that have risen, flourished and disappeared, extends

² Richard B. Morris, "Andrew Jackson, Strikebreaker," *American Historical Review*, vol. 55 (October, 1959) pp. 54-68.

even to such a phenomenon in our society as the American cow hand who worked on the High Plains during the last decades of the nineteenth century. One might think that the rise of the cowboy myth would have directed the attention of labor historians to a subject that would inevitably be of great popular interest, and that there would have been some scholarly investigations of that miserable, underpaid and ill-treated group. Something is finally being done on this subject, but not by labor historians. How little we have actually known about cowboys is shown by the book that appeared only a few months ago on the negro cowboy.³

The great unorganized armies of lumberjacks that worked in the Northern forests in the last three decades of the nineteenth century have been ignored by the labor historian. Here again, the history of this working class begins when the I.W.W. begins to organize them.

This selectivity, which excludes from the labor historian's purview those who remain unorganized or who have not been the subject of legislation, is operative in the contemporary scene, as well. The automobile industry is a special favorite of the labor historian. We have had studies of the industry and NRA, of the struggle to organize, and of the unions that have risen in the field. Organized workers in any way associated with automobiles, such as steel workers, rubber workers, and truck drivers have all been given attention. But there is a large class of workers on whom the industry depends that has remained unorganized. I refer, of course, to the garage mechanics who keep our cars running. This is an especially interesting trade. It is a highly skilled occupation which has no apprenticeship system and no organized method of recruitment. How did the trade originate? How are automobile mechanics trained? How do employers find them? Why do they remain largely unorganized? I do not think any historian has been interested in these questions, and I can think of no reason for this working class having been ignored except the fact that it is unorganized, and it has not been the subject of special legislation.

European historians frequently produce what they call histories of the working class of their country. If in this country we could bring ourselves to thinking not of the history of "labor," and even not of the working class, but rather of the varied succession of American working classes that have sprung up temporarily in particular times or places

³ Philip Durham and Everett L. Jones, *The Negro Cowboys* (New York: Dodd, Mead & Co., 1965).

to fill a particular need, and then have disappeared as the country itself changed, it might help to liberate the concept of labor history from the confines in which it now finds itself enclosed. It seems to me that the field of labor history must soon make a choice. It must either enlarge its sphere to include unorganized working classes, past and present, or see those areas taken over entirely by the folklorist, the sociologist, and the "American Studies" specialist.

But if the labor historians should decide that they wish to write the history of all of the working classes of this country, they will have no choice but to learn to use sources of a kind that they have heretofore chosen largely to ignore. These sources are of several classes. The first is normal archival materials which are not found in catalogs, calendars, and indexes under the heading of "labor." There are quantities of information on labor history in early governmental archival materials if the labor historian will only learn how to look for them. It is significant that Richard B. Morris' article, previously cited, is based on materials that he found in United States Army records in the National Archives, as well as in the records of the Chesapeake and Ohio Canal Company, a private business organization, whose files, by a curious chance, also happen to be in the National Archives.

The fact of the matter is that there are large quantities of governmental records which contain information that shed light on almost every aspect of labor history in this country, but it takes some ingenuity and imagination to find it. All types of government records relating to purchasing, to contracts and to construction projects usually contain material relating to wages, prices, and sometimes to the kinds of workmen to be used. This is particularly true of the nineteenth century when documents of this kind were drawn up in great detail and are still to be found preserved in large quantities, especially in the records of the Army and Navy Departments, and what are now the records of the General Accounting Office. As a matter of fact, such materials can be found in the National Archives among the records of almost any governmental agency that you can mention. Still other sources are available in government archives. Census records and tax records, properly used can throw much light on areas that have hitherto remained dark.

An even more fruitful class of materials for the study of labor history are the archives of American business. It has now become something of a status symbol among older and larger corporations to

have an archivist, officially designated as such, who has responsibility for the preservation of the older records of the organization. The Ford Motor Company and the Firestone Tire and Rubber Company have archives and employ archivists. A similar development has taken place in a large range of business activities. The complete family and business records of the Dupont family going back to 1780, lavishly housed and beautifully organized, are available at the new Eleutherian Mills Historical Library at Greenville, Delaware. At that institution may also be found large quantities of other business and industrial records for important business enterprises in the Middle Atlantic states for the past two hundred years. Many businesses that do not wish to preserve their own records have turned them over to private institutions. The complete old files of the Chicago Burlington and Quincy Railroad and the Illinois Central Railroad are at the Newberry Library in Chicago. The Baker Library of the Harvard School of Business Administration now has a vast collection of older records of every conceivable kind of business organization. Labor historians should give more thought than they have in the past to the potentialities of the records of private business as a source for the unwritten labor history of this country. It may seem somewhat paradoxical to recommend that labor history be studied from business records, but in this respect the labor historian studying the history of unorganized workers who produced no documentation is like that of the historian of the Indian that I mentioned a few moments ago, who, for lack of written records produced by the Indian, must perforce use the white man's records.

But the historian must also learn the value of sources of a kind that he has never been trained to use, notably oral tradition, folklore, and popular literature. This historians of immigration in this country learned about a generation ago that one of their most important sources was to be found not in this country, but in the lands from which the immigrants came. I mean especially the class of materials now known as "immigrant letters." These "immigrant letters," the thousands of letters written by first generation immigrants in this country to their families and friends still living in the communities from which they had immigrated, and which have been preserved there, opened up a whole new range of ideas, information and understanding of the first generation immigrant in this country. Might they not also contain material of value for the labor historian? It is this kind of imaginative seeking

of new sources which the labor historian must undertake if the field is to grow in understanding and importance.

Of course, the underlying assumption of what has been said here is that labor historians should want to do more than to write the history of the labor movement in this country. It may be that many of you will think that this is neither necessary nor desirable and that labor historians should remain quite content to leave such writing as is to be done on the history of the unorganized working classes of this country to the folklorists, the sociologists, the American Studies specialists, and those writers of historical fiction who undertake some research in connection with their writing.

Jurisdictional disputes between academic faculties can be just as sterile and unrewarding as in the field of labor itself and productive of just as much bitterness. Perhaps there is good reason for the areas that I have been talking about to be left out of the field that labor history has staked out for itself. All that one can ask is that there be a realization that a conscious choice must soon be made by the leaders in this field and that this decision will govern the future development of the kind of study and writing about American labor that will be done in this country.

RECENT LITERATURE IN AMERICAN LABOR HISTORY

EDWARD PETERS

California Conciliation Service and University of California, Los Angeles

One of the problems often facing labor historians is the tendency of persons who have played a secondary or perhaps nonexistent role in the shaping of great events to give an account of those events which recasts their participation in an heroic role. An even greater problem is the penchant of union heads for devaluating or expunging entirely from their memories meaningful events which occurred prior to their ascension to power and prominence. An uncritical acceptance of these egocentric accounts of a union's birth and development all too often emerges as the "Eureka" theory of history.

This theory has been deservedly caricatured: In the beginning was the mass of workers, inertly enduring their oppression. Then, up steps the indomitable Harry Bridges, Walter Reuther, or Joe Curran, and proclaims in folk-song style, "Our wives and kids will starve to death if we don't get organized." The light of revelation bursts over the rough-hewn, innocent faces of the workers, (such a light as must have glowed on Archimedes' face), as if the thought of organizing had never before occurred to them and they chant happily: Yea, yea,—in refrain.

Years ago, the prevalence of the "Eureka" theory had me wondering just how far off the elder Henry Ford was when he said: History is bunk.

Labor histories written in the past decade, however, have much more perceptively drawn the fine line between charisma and heroic fable. A perusal of a dozen such histories in recent months has been a gratifying experience. Worth noting in particular are some enlightening observations of Gompersism and an enormous amount of pertinent material on New Deal and post-New Deal unionism. Understandably, much of this material has been presented as "raw" history, unrefined by interpretive insights. Key developments have been reported as isolated events, probably because a true perspective is as yet lacking—lacking because there is too often a myopic view of the labor movement of today.

The contemporary American labor movement, the movement which emerged from World War II, does not occupy just another rung on the evolutionary ladder of progress. It is virtually a brand new labor

movement. None the less, it maintains an unbroken continuity with its past by a staunch adherence to the precepts of Gompersism—but a Gompersism qualitatively different from that of any pre-World War II period. The broad foundation upon which the old, and now the new, house of labor is built has for me never been stated more lucidly, shorn of customary platitudes and pieties, than in the following passages by Irving Bernstein:¹

Gompers accepted capitalism not because he considered it an ideal system for the worker but because it was here and here to stay. The job for labor was to make the best of it pragmatically. The house of Utopia would take care of itself; philosophers might debate its furnishings but busy unionists had no time for idle speculation. Conflict between the classes was endemic under capitalism, but not the class struggle in the Marxist sense. Rather it was a contest over how the economic pie would be cut. Here labor's aim was both clear and simple: "More, more, more, now."

The foundation of power was economic organization. Workers, therefore, must engage in voluntary self-organization to make sure that they got "more." For the worker the supreme loyalty must be to the union; for the union supreme loyalty must be to the economic advancement of the worker. For the organization this loyalty must be exclusive, uncontaminated—"pure and simple." Nonworkers who intervened in union affairs were meddlers; Gompers viewed with suspicion intellectuals, well-intentioned reformers, and Socialists. "Voluntarism" was the key word in his philosophy, and self-organization of the working class lay at its base. "Gompers," John R. Commons observed, "became even more class conscious than Marx himself."

It may be asked, if Gompersism be the common foundation of the old and the new, what then is so qualitatively different about the new labor movement? Is it the prevalence of written, binding contracts? Written and binding contracts were not uncommon before World War II.

Is the difference the customary structuring of contract negotiations to a strike deadline announced by the union or implied in the expiration date of the contract? Strike deadlines were common enough in the old days.

Is the difference to be found in the system of private arbitration, legally binding upon the parties? A large part of unionized industry in pre-war days was no stranger to arbitration.

¹ Irving Bernstein, *The Lean Years* (Boston: Houghton Mifflin Co., 1960), p. 91.

All these basic characteristics, we had them all, at least in embryonic form. Development? Progress? Yes, says the objector, but in essence nothing new. These impressions of the past, when scrutinized in the light of recent labor histories, turn out to be fragmentary and nebulous and in many instances are the products of sheer nostalgia.

The labor histories which have been most enlightening, which have plumbed deepest the undercurrents of change, are those which focus on the New Deal era. The reason for this becomes readily apparent when we compare these histories with standard textbooks which start with the indentured servant of colonial times.

Most standard textbooks present labor history chronologically, first in sketchy, seemingly haphazard accounts of pre-Civil War skirmishes, then in unbroken continuity the post-Civil War story, beginning with Sylvis and the National Labor Union, The Knights of Labor, and the formation of the A.F. of L. The story continues, an evolutionary progression despite temporary setbacks, narrated against a colorful, often violent background—until the big breakthrough in the late 1930's. At this point an unprecedented leap forward is reported, but no basic transformation of the labor movement is noted, except in the sense that that which was embryonic or small has now become large. To these historians it is still essentially the same old labor movement. Like the *nouveau-riche* cartoon character Jiggs, underneath the tall silk hat and the starched shirt front is the same obdurate lowbrow yearning for his corned beef and cabbage. As between Big Bill Hutcheson and Maurice Hutcheson, the differences are considered idiosyncratic rather than functional.

In making these observations, let me hasten to add that it is not my intention to deprecate chronological histories as such. Two recent works in this category which I found especially rewarding were authored by Philip Taft² and by Henry Pelling.³ From the point of view of readability, fullness, and scholarship, the Taft book surpasses any single-volume overall history of labor that I have read. As for Pelling whose knowledge of the English labor movement deepened his vision of our own, I can only concur with those reviewers who pronounced it the best short history of American labor now in print. Of particular note is the skill with which he linked the seemingly isolated

² Philip Taft, *Organized Labor in American History* (New York: Harper & Row, 1964).

³ Henry Pelling, *American Labor*, (Chicago: The University of Chicago Press, 1960).

struggles of the early unions to the era of Jacksonian persuasion. Pelling was thus able to impart a sense of continuity to pre-Civil War labor history achieved by no one else.

If the works of Taft and Pelling are considered high-water marks of perspective attained by viewing the sweep of history, the task of penetrating the surface appearance of the contemporary labor movement falls most heavily on the historians of the Great Depression and the New Deal. The labor historian who begins with the New Deal stands on a watershed which parts the stream of the past movement from the present. Janus-faced, he views this stream surging in from the past to become diverted onto a new course toward the future. To tell the story from this vantage point requires an insight which cannot be glossed over by a mere recital of events.

Under the impact of great social upheavals, long-standing myths often disintegrate in the face of reality. Historians, therefore, who focus on the turbulent 1930's are not as prone to underestimate the important, or to overstress the less important. In attempting to separate New Deal myth from reality, I have relied heavily on two books: Galenson's *The CIO Challenge to the AFL*,⁴ and a compilation of essays *Labor and the New Deal*⁵ written by extremely knowledgeable people including the editors Derber and Young. Both books complement each other; Galenson concentrates on the schism in labor and the historic confrontation between the CIO and the employers of the nonunion mass production industries, and the writers of *Labor and the New Deal* emphasize the legislative and political impact of the New Deal during that period.

Derber's essay should be required reading for the contributors to the literature of disillusion who tell us labor unions are rapidly becoming obsolete, capable of not much more than routine housekeeping chores. Labor leaders, they add, are bureaucrats, mentally and physically sluggish, many of them cynical and corrupt. Since this indictment is arrived at by comparison with a nebulous labor movement of halcyon days, presumably the 1930's, the writings in this vein could just as appropriately be called literature of nostalgia. Implicit throughout is the notion that giants once strode the earth where pigmies now tread with mincing steps.

⁴ Walter Galenson, *The CIO Challenge to the AFL* (Cambridge: Harvard University Press, 1960).

⁵ Milton Derber and Edwin Young, eds., *Labor and the New Deal* (Madison: The University of Wisconsin Press, 1957).

Derber notes that in 1929, the year of the Crash, “. . . the only major sectors of the economy which were extensively unionized were building construction, printing, anthracite mining, men’s clothing, the railroads and the street railways.”⁶ “In 1929 the construction unions represented a quarter [of the labor movement] and the unions in transportation, communication, and utilities together represented another quarter of the total union membership. Another quarter was represented by manufacturing unions, but mainly in small-scale industrial establishments.”⁷

Derber also notes that the building trades unions, the very heartland of the craft-union outlook “. . . represented about one-third of the total AFL dues paying membership and a far more significant proportion of the labor movement’s effective strength.”⁸

This picture, to be complete, must be related to the total pre-New Deal civilian labor force. The labor movement entered the twentieth century with little more than three-fourth of a million members, comprising 3 percent of the civilian labor force. Two decades of steady growth brought union membership to a peak of five million, comprising 12 percent of the civilian labor force. Then, post-war reaction, coupled with the prosperity of the 1920’s and followed by the Great Depression, set the labor movement back numerically below the year of our entrance into World War I. By 1933 total union membership had declined to three million, comprising less than 6 percent of the civilian labor force. For all but one year of the pre-New Deal period, at least 90 percent of the civilian labor force remained unorganized.⁹ Included among the nine out of ten workers quartered outside the house of labor were such entire basic industries as auto, steel, maritime, and oil, where unions had barely penetrated or had been all but wiped out in the 1920’s.

Summarizing briefly, from the turn of the century until the mid-1930’s the historic challenge to the labor movement was ideologic—the organization of the unorganized—and the labor movement generally failed to meet the challenge of its time. From this concrete picture it may be asked how justified are labor historians who reproach the social unions for the archheresy of dual unionism? Indeed, so vast

⁶ *Ibid.*, p. 17.

⁷ *Ibid.*, pp. 17 and 18.

⁸ *Ibid.*, p. 14.

⁹ Figures taken from Irving Bernstein, “The Growth of American Unions,” *The American Economic Review*, (June 1954).

were the unorganized territories in 1930 that exclusive jurisdiction for many of the craft unions, as the CIO subsequently demonstrated, could be likened to an old Spanish land grant which bestowed on a court favorite and his descendants a quarter or a half of California.

As for the glorification of the big breakthrough of the late 1930's, I cannot resist the Churchillian comment that never have so many indulged in so much nostalgia over so few years. Many if not most of those who led the breakthrough, which by 1941 brought the labor movement to 8½ million (15.4 percent of the civilian labor force), still hold key leadership positions in the labor movement of today. And if a preoccupation with administrative duties has replaced their crusading ardor, the change was not a simple matter of choice. The Gompersism of a labor movement fluctuating around the 18-million mark (one-third of the civilian labor force) could hardly be the Gompersism of a labor movement which represented less than one-tenth of its potential.

The birth of the new labor movement also marked the turning of the tables on the skilled craftsmen who had trafficked on the defenselessness of their unorganized semiskilled and unskilled brethren. For example, in the two decades since World War II, more often than not, the skilled workers outside the building trades have had to grit their teeth and accept the same across-the-board wage increases offered to production workers. Despite the formation of skilled trades departments in industrial unions such as the UAW, the skilled have had to rely more on individual threats to quit than on collective bargaining to maintain an acceptable differential between their wages and the wages of the unskilled.

The most important single characteristic of post-war Gompersism is the central role now accorded the written labor contract. An essay by Doris E. Pullman and L. Reed Tripp supplies valuable data on this development. The labor contracts under the old unionism, with few exceptions (principally in the railroad industry), were skeletal or generalized working agreements where working conditions or rules were left to more informal arrangements.¹⁰ Thus, pre-New Deal labor contracts approximated the Western Europe concept of the collective agreement as a statement of general principles and purposes, depending for enforcement on the good faith of the parties or job action by

¹⁰ Pullman and Tripp, "Collective Bargaining Developments" in *Labor and the New Deal*, op. cit., pp. 333-335.

workers, rather than their present status as a legally enforceable document.

The supremacy of the written, binding labor contract has been popularly credited to the NLRB. While NLRB rulings have undoubtedly spurred this trend, the outcome was assured when the new industrial unions began to sign no-strike no-lockout provisions with binding arbitration of grievances for the contract term. The CIO unions thus demonstrated that job consciousness was not peculiar to craft unions but was characteristic of all American labor, even of unions whose leaders might have a contrary philosophy.

The binding agreement won out because it provided for undisturbed working conditions and labor costs for a specified period of time. The reluctance of social unionists who viewed this development as inimical to class solidarity had to be overcome. Pre-depression memories haunted them of unions working behind the picket lines of other unions in the name of "sanctity of contract." They also had considerable misgivings about diverting the class struggle on grievances into a quasi-judicial proceeding.

Even among conservative labor officials the freezing of basic wages and conditions for a fixed period was not an unmixed blessing. Many of them preferred year-round bargaining European style, not, of course, to wage class warfare, but to keep negotiations on a "human relations" basis. Instinctively they shrank from negotiations structured to a deadline implicit in the contract expiration date. The dramatization of conflicting self-interests in an atmosphere of crisis bargaining made them apprehensive about their ability to hold in check a restless membership.

The profound irony of collective bargaining American style is that even as grievance adjustment becomes increasingly judicial at its terminal point, the legislative process of negotiating contract terms must be featured by a real or simulated confrontation of naked power. The results of bargaining must be demonstrably won to be accepted by the union membership.

Since 1961 the average wage settlement in manufacturing has held approximately to Administration guidelines of 3.2 percent. Even so, many if not most unions find it necessary periodically to engage in struggle, often more taken than real, before they can wrap up a 3 percent economic package. Therefore, crisis bargaining has been assailed not only by proponents of year-round human relations bargaining, but also by those who have ethical qualms about "fixed" fights. As to the

latter objection, it should be noted that the common goal of the parties in these cases is predetermined by the very nature of the situation rather than by behind-the-scenes arrangements. Also, rank-and-file union members are becoming much more sophisticated about the structural character of their negotiations and appear to enjoy being entreated and argued with, until they have adjusted their expectancies to a settlement they had every reason to suspect was there from the very first bargaining session. The explanation for their attitude is not hard to uncover if we recognize that the basic findings of Elton Mayo are just as applicable in trade-union situations as they were to the controlled conditions of his Hawthorne experiment.

A major reason for the lag in perspective of the new unionism is that the transition from the depression breakthrough took place in a wartime economy, under the wraps, so to speak. Although an unrelenting struggle continued, the decisive arenas were shifted to the offices and conference rooms of government agencies, especially the National War Labor Board; consequently the intensity of the struggle was shielded from the public eye. But this was the period when the labor movement advanced from 8½ million members to 13 million, when the foundation was laid for a private system of arbitration buttressed by the courts, having no counterpart anywhere in the world.

With the exception of the railroad and garment industries, arbitration of grievances in pre-New Deal labor relations was a "sometimes" thing. Even after the breakthrough, Pullman and Tripp observe:

By and large, within the newly organized mass production industries at the turn of the decade, arbitration either was not mentioned at all in the contracts, or it was provided for on an *ad hoc* basis. The conclusion to be drawn is that it was visualized as a somewhat remote possibility.¹¹

Early arbitration was equated with humanitarianism, scorned by voluntarists and ideologists alike. The arbitrator was seen as a mediator with a club, dispensing his own brand of industrial justice on behalf of the weak and helpless—certainly a far cry from grievance arbitrators of today who utilize a great deal of criteria imported from contract law and applied in a quasi-judicial fashion. Members of the National Academy of Arbitrators, who do most of the arbitrating, adhere to the record and render the mutual intent of the parties to the extent that such intent is disclosed by the agreement, the testimony at the arbi-

¹¹ *Ibid.*, p. 354.

tration hearing, the exhibits, and other data which make up the record of the proceeding. Yet so great is the lag in perspective of contemporary labor relations that the stereotype is still widespread of an arbitrator who sits like Solomon brandishing a sword, ever ready to bisect babies to reach a true verdict.

Joel Seidman, in his enormously informative book on labor during World War II, gives an absorbing account of the steps taken by the Defense Mediation Board, predecessor to the War Labor Board, to formulate criteria for settling wage disputes. In the following passage we are shown how basic standards for interest arbitration were incubated in these agencies:

In the large number of wage disputes that were referred to the board, the absence of a set of principles forced the panels to improvise, which meant either that decisions followed relative bargaining strength or that panel members fell back upon their own beliefs as to desirable industrial practice, until guideposts were provided by decisions in other cases. Sometimes panels were influenced by the prevailing rate of wages in the industry and in the area, sometimes by the question of the company's ability to pay, sometimes by the rising cost of living, sometimes by the need to attract workers to essential war industry.¹²

Now a few comments on two topics which must be compressed to keep within some bounds of the allocated length of this paper: the role of the Wagner Act and of the Trade Union Unity League. One of the most prevalent myths shared by labor historians is that labor could not have achieved its historic breakthrough of 1936-37 without the decisive help of the Wagner Act and other New Deal legislation such as the NRA. The record of that period, spread out in detail by labor histories such as Galenson's authoritative work,¹³ affirms what those of us with long memories knew all along: if ever a series of events merits the term "operation bootstrap," it was the recognition agreements won successively in rubber and auto by use of the sit-down strike, followed by the signing of a contract with U. S. Steel. All three citadels of mass production industry were decisively breached *before* the U. S. Supreme Court in April 1937 had upheld the constitutionality of the Wagner Act of 1935.

Prior to the Jones-Laughlin decision the Wagner Act was dormant,

¹² Joel Seidman, *American Labor from Defense to Reconversion* (Chicago: The University of Chicago Press, 1953), p. 58.

¹³ Galenson, *op. cit.*

ignored by virtually all major businesses who had every reason to expect that the same "nine old men" who had declared other key New Deal legislation to be unconstitutional would surely put an end to the Wagner Act. This is not to minimize the importance of the act (after its constitutionality had been affirmed) as an instrument for vastly accelerating the pace of organization, enabling unions to gain recognition from companies they could not have hoped to organize otherwise. Nor can the catalytic effect of Section 7(a) of the NRA in triggering the first depression strike wave in 1933, followed by the even greater strike wave of 1934, be ignored. Also, as Jerold Auerbach has pointed out in his careful study,¹⁴ the role of the La Follette Committee in curbing the more extreme employer resistance to unionism must be underscored. Even so, all of these factors were auxiliary to the main thrust of labor itself in the breakthrough of rubber, auto, and steel.

A final comment on a topic that deserves a paper of its own—the role and influence of the Trade Union Unity League on the watershed of New Deal history. The TUUL was formally launched in 1929 and dissolved in 1935. Other than some deeply probing observations in an essay by Bernard Karsh,¹⁵ I have not yet seen a satisfactory and up-to-date evaluation of its brief span of existence in print. To treat TUUL activity solely as the operation of a foreign conspiracy, having only shallow or incidental roots in American soil, is to caricature a crucial influence on the 1933 and 1934 strike waves that prepared the ground for the formation of the CIO in 1935. Here again, an important factor in labor history is glossed over and finds expression only at labor conventions in the pre-dawn reminiscences of late stayers at cocktail parties.

Although labor historians are no longer prone to regard communist trade-union activity as something outside the bounds of scholarship, there are lingering attachments to the stereotype of the "tabloid Red"—a term spoofing sensational press treatment of the Red Menace which originated in a hit musical called "Parade," produced by the Theatre Guild in 1935. The tabloid Red is the villain of the old-fashioned "mellerdrama." His designs on the virtuous maiden, American Labor,

¹⁴ Jerold S. Auerbach, "The La Follette Committee: Labor and Civil Liberties in the New Deal," *The Journal of American History*, Vol. LI, No. 3 (December 1964).

¹⁵ Bernard Karsh, "The Impact of the Political Left" in *Labor and the New Deal*, op. cit.

are repulsed, baffled, and foiled with monotonous regularity. Tabloid Reds do not plan, they plot. They do not revise or alter policies, they repudiate them. In the most complex periods of social change, they single-mindedly pursue one course of action inflexibly, ruling out all others.

For example, it is commonly believed that the TUUL completely discarded the boring-from-within policy of its predecessor, the Trade Union Educational League, and followed an exclusive, undeviating policy of dual unionism. Actually, the TUUL followed both policies. It mattered little to communist leaders whether they gained their influence by organizing outside the union having exclusive jurisdiction, or by boring from within that union. Whenever possible, both policies were pursued simultaneously. If dual unionism was the dominant policy, as it was in most cases, it was because that policy got more results—which was why the TUUL was formed in the first place. But the 1929 shift in emphasis from boring from within to dual unionism was never an either/or policy.

The maritime industry will illustrate the point. The seamen were offered the TUUL affiliate, the Marine Workers Industrial Union. For the longshoremen the approach was to bore from within the International Longshoremen's Association. Early in 1933, when under the impetus of Section 7(a) of the NRA the San Francisco longshoremen were streaming into both the ILA and the MWIU, the TUUL heads did not hesitate to dissolve the latter union and encourage its members to enter the ILA. The MWIU made only sporadic attempts to organize nonunion longshoremen coastwise on the Atlantic and Gulf Coasts. The basic emphasis was on boring from within the ILA.

Nothing could be more erroneous than the supposition that the TUUL in the end failed in its objectives. On the whole its activities were a huge success. The dissolution of the TUUL in a certain sense attested to its effectiveness. It was then entrenched in several industries and in a position to be much more influential by riding the wave of the new unionism inside the AFL of 1935 than it could possibly have been if it had isolated itself from the mainstream.

It is important to examine why and how the TUUL, of all the radical groups, succeeded the Wobblies as the center of gravity of the radical left. The TUUL did more than perpetuate the ideological traditions of its radical predecessors. Its most important accomplishment was the development of practical organizing strategies and tech-

niques, based on a concept of rank-and-file trade unionism, which added much to the know-how of a new generation of nonradical labor leaders. The basic feature of rank-and-file trade unionism is the involvement of the rank and file in the decision-making process and activity at all stages of a struggle. Although the TUUL was not the originator of this approach, it was the first to use it extensively for winning short-term goals.

A notable organizing technique perfected by the TUUL leadership was the use of grievances to move groups unresponsive to bandwagon appeals. They taught that it was not enough to campaign on major issues, making Utopian promises as a political party does at election time. TUUL organizers had to find issues that made the workers feel there was a practical possibility of winning and for which they were willing to fight. Especially, they learned to ferret out the relatively small, burning grievances that acted as a catalyst on the group, and then to dramatize them by word and leaflet. A standard TUUL organizing strategy was to concentrate on a key group of a key department in a plant, giving a great deal of personal attention to each individual in the group until it was welded together into a solid union force, meeting covertly in homes and bars. This activity would be supplemented by a regular distribution at the plant gates of a mimeographed shop paper, replete with anonymous letters from all departments, pounding away on day-to-day grievances as they arose. When the union felt that enough sentiment had been worked up for an organizing strike, it would move swiftly. The key group would pull the key department, march it to all the other departments, and shut the plant down. By the time of the formation of the CIO, former TUUL leaders were among the most experienced and competent organizers available, and for this reason, rather than overconfidence or naivete, John L. Lewis utilized their services extensively.

Because the TUUL put its indelible stamp on the labor movement in the two years preceding the formation of the CIO, salient facts of its brief existence are still being uncovered piecemeal. To the historian who would attempt to complete the story, I would suggest that he begin with Galenson's monumental work and continue where it leaves off.

For example, Galenson's generally accurate portrayal of the National Maritime Union is incomplete in its account of two events. The final rupture between NMU President Joe Curran and the Communists in 1946 is noted, but no mention is made of the fact that several in-

fluent former TUUL leaders joined forces with Curran and made it possible to break the communist hold on the union.¹⁶ Also, in discussing the expulsion in 1939 of NMU Secretary Jerome King and his group, Galenson notes that one of the charges against them was collaboration with the shipowners.¹⁷ He does not, however, mention the sworn confession of Octave Loones, editor of the King group's unofficial opposition paper, *The Rank and File Pilot*. Loones defected from the King group with a startling special issue of the *Rank and File Pilot*, giving a detailed account of the collaboration which was corroborated by another leader of the group, Walter Carney. Not only was it in great part financed by key shipowners, but prominently involved in the alliance was the Railway Audit and Inspection Corporation, a labor detective agency that did not escape the attention of the La Follette Committee.¹⁸

What is surprising to me is not that there were omissions in the book, but, considering the vast panorama of industries in the throes of upheavals so accurately depicted, that a reader with a fairly retentive memory and a more than passing acquaintance with the maritime industry in the 1930's could flag only two of them.

A concluding observation might be fitting on a development of great portent to the new unionism—the quiet, almost overnight shift in political power to urban centers, occasioned by U. S. Supreme Court rulings on reapportionment. If there is one aspect of Gompersism found wanting by friend as well as antagonist, it is its attitude toward social legislation. The average union member, who accepts unquestioningly the legend of labor as a pioneer in this field, will be jolted by the record detailed in recent labor histories. The role of Gompersism in this century in the enactment of key legislation such as minimum wages for men, unemployment compensation, social security, the Wagner Act, the continuation of the Fair Employment Practice Commission as a federal measure after World War II, ranged from outright opposition to reluctant acquiescence.

The pre-New Deal opposition of Gompers and his followers to minimum wages and social security can be considered nothing less than a distortion of the honored principle of voluntarism. The explanation that the Gompersites were motivated by a belief that these matters should be reserved exclusively for collective bargaining simply does

¹⁶ Galenson, *op. cit.*, p. 443.

¹⁷ *Ibid.*, p. 442.

¹⁸ Auerbach, *op. cit.*, p. 443.

not square with the contrary views held by the Gompers of the nineteenth century.

More probably the Gompersites were moved by a well-founded sense of weakness to such extremes in cultivating important employer support as to impair the normal checks and balances of collective bargaining. The new political supremacy of the urban centers upon which the labor movement is based, is bound to eradicate any vestiges of that sense of weakness and could profoundly alter the labor movement's approach to politics.

DISCUSSION

JEROLD S. AUERBACH
Brandeis University

To paraphrase both Henry Ford and Edward Peters: *labor* history is bunk. American labor history, according to one of the ablest members of the profession, "has suffered for many years at the unskilled hands of most of its practitioners."¹ If this evaluation is accurate—and I think that it is—an examination of recent literature in American labor history should not only confirm this harsh judgment but yield constructive alternatives. Mr. Peters' perusal of the literature meets the first of these requirements, albeit by implication. I do wish, however, that he had not been so reticent with regard to the second.

A frequent target of reviewers and critics in any discipline is uncertainty of focus; numerous authors have been, and doubtlessly always will be, chided for drifting from their chosen subject. The problem in labor history is precisely the reverse. Most labor historians have demonstrated a zealous commitment to their subject—or at least to their subject as they defined it. Unfortunately, this very commitment has proven to be a source of weakness rather than strength. Why? Because labor historians have failed to confront a basic question: must labor history be union history? Or, if they have confronted this question, they have invariably and unwisely answered it affirmatively.

Mr. Peters' remarks reflect, and reinforce, this tendency. Virtually every book that he cited represented variations on the theme of labor history as the history of unionization. The twin foci of recent literature, he suggests, are "Gompersism" and the New Deal and post-New Deal (organized) labor movements. My central criticism is not that he has misrepresented the drift of this literature—although there are indices of change which he neglects—but that he seems reasonably (or unreasonably) tolerant of it. His approach, like the approach of the historians whose work he summarizes, treats with expertise the exposed tip of the labor history iceberg but neglects the vast mass beneath the surface.

Within the framework of labor history as union history, Mr. Peters has criticized labor historians for indulging in what he aptly calls "the literature of nostalgia." His impatience with those who genuflect

¹ David Brody, Review in *Labor History*, VI (Spring 1965), 166.

to the New Deal while murmuring imprecations against the sorry current state of union affairs is eminently justified. But I wonder whether he does not fall victim to the same tendency. He, too, speaks of the New Deal as "a watershed which parts the stream of the past movement from the present." And he concedes that contemporary union leaders seem preoccupied with administrative duties at the expense of "crusading ardor."

At the risk of seeming to play both sides of the same street, I would like to suggest that while the New Deal years may well represent an unfair point of reference for denigrating current union activities and leadership, a convincing argument can be made that Mr. Peters has *underestimated* the impact of New Deal labor legislation on union gains of the thirties. Labor historians, he suggests, have perpetrated the myth that "labor could not have achieved its historic breakthrough of 1936-37 without the decisive help of the Wagner Act and other New Deal legislation such as the NRA." For Mr. Peters the salutary union developments of that period represent "operation bootstrap," where workers in vital segments of mass production industry secured agreements with management prior to the *Jones and Laughlin* decision upholding the National Labor Relations Act. Section 7(a) and the Wagner Act, he insists, were "auxiliary to the main thrust of labor itself. . . ."

I have no intention of minimizing the courage or fortitude of industrial workers and union organizers who refused to surrender to injunctions, spies, strikebreakers, private police, or gas guns and billy clubs. The larger question, perhaps, is why *didn't* they surrender? Certainly the desperation born of the Depression was a critical factor. So, too, I submit, was New Deal labor legislation, which established a new legal framework for labor relations in this country. Union organizers exaggerated when they told workers, after enactment of 7(a), that the President wanted them to join a union. If Roosevelt would have gasped at this effrontery, workers, with justification, found the statement plausible. But the key statute, of course, was the Wagner Act, which not only gave workers the legal right to organize but provided the machinery to enforce this right. For the first time, workers had the legal right to resist anti-unionism, and they proceeded to use their new power to the hilt. To be sure, their own efforts were of vital importance, but there had been similar, and fruitless, efforts in the past when the legal basis of unionization did not exist. It is

hardly coincidental that the two great union waves of the thirties followed on the heels of 7(a) and the Wagner Act. Mr. Peters even concedes as much; he notes that "under the impetus of Section 7(a)" longshoremen "were streaming into both the ILA and the MWIU. . . ." Clearly, there could have been no successful "operation bootstrap" without New Deal labor legislation as the foundation.

The emphasis in recent literature on the New Deal is symptomatic of a larger deficiency in the writing of labor history: concern for the institutions at the expense of the individual; for the organization to the detriment of the larger society. The failure, in a word, is one of perspective. Reference to a recent article, journal and book on labor history will make this apparent. Five years ago, in an essay entitled "Problems and Sources in Writing Labor History," Richard B. Morris issued a commendable call for the use of unorthodox material in fashioning labor history—he cited court and business records and newspapers. Yet what Professor Morris offered with one hand he took back with the other. In his concluding remarks he wrote: "Ideally, it would have been helpful had early trade unions kept careful and systematic records, had labor leaders preserved their correspondence . . . and had statesmen . . . shown a greater preoccupation with branches of labor outside the institution of slavery. . . ." ² In translation this might read: if only tradition-bound historians could utilize traditional sources, they might safely continue to write traditional history. Since, sadly, these sources are lacking, we must muddle through as best we can with unorthodox material—and occasionally even an unorthodox question or two.

The journal in which Professor Morris' article appeared was *Labor History*, which has now been publishing articles on the subject for six years, certainly long enough to establish its credentials as a repository for monographic literature in the field. Recently, I examined forty-five articles published during the years 1961-62 and 1964-65. Thirty-six fit neatly into the pigeon-hole labeled institutional labor history. Of these, fourteen are studies of various aspects of organized labor, thirteen focus on labor and government, six discuss individuals, and three treat dramatic events. Without itemizing the remaining nine, suffice it to say that only two break new methodological ground. To inflict further suffering on Clio, one of these was written by an econ-

² Richard B. Morris, "Problems and Sources in Writing Labor History," *Labor History*, I (Fall 1960), 318.

omist and the other by a sociologist. These remarks are not, of course, intended to cast discredit on the editors of *Labor History*, who must by now know all about silk purses and sows' ears.

Perhaps the nadir of labor history viewed through the wrong end of the telescope came in a recent study of labor and Progressivism in New York.³ Potentially this is a significant subject: from an imaginative treatment we might learn more about the nature and thrust of Progressivism, the values of early twentieth century reformers and the society they rebelled against, and the social structure of the Empire State. Instead, the author chose to examine the relationship between Progressives and *organized* labor, although he admits that in 1910 the latter represented but a minuscule percentage of even the industrial working force, which in turn comprised but a third of the total work force in the nation. Further pursuit of this line of approach might produce a history of transportation based solely on a study of the shoe industry.

If there were no alternatives to labor history as institutional history we would be compelled to accept the traditional approach. Fortunately, there are alternatives that have already reached fruition. Reference to two of them must suffice. Irving Bernstein and David Brody have demonstrated the wisdom of focusing on workers rather than on unions. Mr. Bernstein's work is too familiar to justify restatement here. Professor Brody's study of steelworkers during the non-union era prior to World War I offers conclusive evidence that labor historians can ask meaningful questions and can break the constricting bonds of their discipline.⁴ His more recent volume, though soberly titled *The Butcher Workmen: A Study of Unionization*, also breaks new ground by analyzing the process and causes of unionization rather than describing its consequences.

Perhaps the most challenging new perspective appears in Stephan Thernstrom's *Poverty and Progress: Social Mobility in a Nineteenth Century City*. Thernstrom's study of working class life in Newburyport, Mass. from 1850-1880 offers a partial answer to the vital question: how open and fluid was nineteenth century class structure in the United States? His focus is on workers who were untouched by the organized labor movement; his problem is to measure the myth of

³ Irwin Yellowitz, *Labor and the Progressive Movement in New York State, 1897-1916* (Ithaca: Cornell University Press, 1965).

⁴ David Brody, *Steelworkers in America: The Non-Union Era* (Cambridge: Harvard University Press, 1960).

mobility against social realities. Thernstrom's tentative burial of the rags-to-riches myth is not the least of his achievements. He has asked new questions, probed new sources, and applied new techniques. His conclusion—"Class differences in opportunities were deep and pervasive; a large majority of the unskilled laborers in Newburyport and a large majority of their sons remained in the working class throughout the 1850-1880 period"⁵—no less than his methodology should stimulate creative changes in the writing, or rewriting, of American labor history.

As Mr. Peters indicated, too much recent literature has been written in an historical vacuum. We should know much more than we do about the social position of the worker at all times in our past, and about his aspirations and feelings. The impact of industrialization on the worker has yet to be fully gauged. We need to know, in the words of one historian, "what it *was like* and what it *felt like* to be a worker. . . ."⁶ Social mobility, class structure, and ethnic conflicts remain unexplored dimensions of the workers' past. Labor, John L. Lewis once complained in a moment of pique, was being strangled in the house of its friends. This warning should be heeded, lest the same verdict apply to labor history.

⁵ Stephan Thernstrom, *Poverty and Progress: Social Mobility in a Nineteenth Century City* (Cambridge: Harvard University Press, 1964), 163.

⁶ Ray Ginger, *Review in Journal of American History*, LI (June 1964), 120.

GERD KORMAN
Cornell University

Although a growing number of historians are working in the field of labor history I believe Mr. Kahn overestimates their number. The following remarks therefore assume that most labor history today is still being written by institutional economists.

Our special problems in the writing of labor history began in 1910 when, at Wisconsin, the colleagues of Frederick Jackson Turner did not harken to their Harvard-bound chairman.¹ Figuratively speaking,

¹ John Higham, *History* (New York: Prentice Hall, 1965), 178; Curtis P. Nettles, "History out of Wisconsin," *Wisconsin Magazine of History*, Vol. 39 (Winter, 1955-1956), 117-118.

instead of inviting John R. Commons up the hill, to chair the history department in Bascom Hall, they left him at the bottom, in Sterling, in the department of economics.* There, to his everlasting glory, he developed institutional economics and within that discipline established the field of labor history. And to their everlasting shame Clio's practitioners pretended as if the history of trade unionism, labor politics, and protective labor legislation had nothing to do with them; these subjects belonged, at the bottom, to the institutional economists. Substantively they parted company, but fortunately, for the historians, Commons shared with Turner the conception that history was the story of conflict between competing interests, the "enthusiasm" for balance and compromise, and the conviction that economic opportunity, in the form of free land, provided the key to understanding America's attributes.² Thus, the historians and Wisconsin's economist remained relatives and the studies of Commons, and those that came from more than a generation of his students formed a part of that great body of historical literature remaining true to the spirit of Turner. These common elements between the followers of Commons and Turner also made it possible for Clio's younger disciples to take on the Common's school of labor history while tackling the Turnerites and the early progressive historians in general. The results of those attacks, and the subsequent attack on the attackers are reflected in Herman Kahn's concerns about labor history and in the options he suggested for future research.

Almost from the start of these attacks, that is in the 1920's and 1930's, the German and English inspired institutionalism was found wanting among younger historians. While the Wisconsin school of institutional economists remained true to the history presented in "American Shoemakers—A Sketch of Industrial Evolution, 1648-1895," institutional history, as such, changed directions. Historians had become "critical of tradition, insensitive to institutional continuities, and preoccupied with domestic conflict." They had become, continues John Higham, ". . . fascinated with the concrete experience of particular groups in distinctive environments. They wrote, usually with a close feeling of identification, about such folk as dirt farmers, indentured

* Actually the university's Central Hall was renamed Bascom Hall on June 22, 1920, and the department of economics, then known as the Department of Political Economy, did not move into Sterling Hall until 1916, the year the building was completed.

² Higham, *History*, 178.

servants, cowboys, missionaries, Indians, and immigrants.”³ I think it is reasonable to suggest that Mr. Kahn invites us to follow this line of historical inquiry; that is to say to use Richard B. Morris’ studies of bonded labor as one set of models.

Mr. Kahn asks us also to look to another line of inquiry, one which represents among contemporary historians discussions of conflict, change, and continuity. Oscar Handlin and his students have examined immigrants and communities seeking to study questions of movement through space and through the ranks of society. But they have not been alone in examining these questions as the studies of Paul Gates, C. Vann Woodward, Merle Curti and their students, and the essays of Richard Hofstadter and William A. Williams testify.⁴

The institutional economists may well say that all those areas do not belong to the labor historian. I agree: they belong to the historian, for frankly, the historian and the institutional economist writing about the past have drifted far apart, so far in fact that Mr. Bernstein’s call of 1960 and Mr. Kahn’s plea this morning means this: institutional economists, become historians and share the spoils of the future.

I agree, with conditions, which I hope Mr. Kahn will accept. The subject matter, not the academic discipline must govern the choice of tools. Students who choose to study the past must become historians. But American historians who choose to study labor—organized, unorganized, disorganized, urbanized, stratified, and sanctified—must become sensitive to, if not acquire the relevant expertise of the insti-

³ *Ibid.*, 189 and 191. See also Harvey Wish, *The American Historian: A Social and Intellectual History of the Writing of the American Past* (New York: Oxford University Press, 1960), 133–157 where Wish discusses “John Bach McMaster and the Rise of Social History.”

⁴ The following are examples: Oscar Handlin, *Boston’s Immigrants* (Cambridge: Harvard University Press, 1941); Rowland T. Berthoff, *British Immigrants in Industrial America* (Cambridge: Harvard University Press, 1953); David Brody, *Steelworkers in America: The Nonunion Era* (Cambridge: Harvard University Press, 1960); Stephen Thernstrom, *Poverty and Progress: Social Mobility in a Nineteenth Century City* (Cambridge: Harvard University Press, 1964); Paul W. Gates, “Frontier Estate Builders and Farm Laborers,” in Walker D. Wyman and Clifton Kroeber, editors, *The Frontier in Perspective* (Madison: University of Wisconsin Press, 1957), 143–163; Charlotte Erickson, *American Industry and the European Immigrant, 1860–1885* (Cambridge: Harvard University Press, 1957); C. Vann Woodward, *Origins of the New South, 1877–1913* (Baton Rouge: Louisiana State University Press, 1951), 175–234; Merle Curti, *The Making of an American Community: A Case Study of Democracy in a Frontier Country* (Stanford: Stanford University Press, 1959); Richard Hofstadter, *Age of Reform* (New York: Vintage, 1960); William Appleman Williams, *Contours of American History* (New York: World Publishing Company, 1962).

tutional economists, or if you will the relevant expertise in the field of industrial and labor relations.

The historian has to climb down from his pedestal, or perhaps up to a higher one. If he is to study labor he must learn how to combine an intra-disciplinary approach with an inter-disciplinary one; and he simply must become receptive to the quantitative methods and theoretical formulations developed by scholars from various disciplines working in the field of industrial and labor relations. If he chooses to study unions and other labor organizations he must mend the artificial split purposefully created by the departments at Madison and Baltimore a few years after Richard T. Ely left Johns Hopkins for the "far" and "wild and woolly country of Wisconsin."⁵ The historian must learn how to integrate the Wisconsin school with the administrative and structural approach developed by Messrs. Hollander, Barnett, and Glocker. Effectively done the historian of labor organizations could join a growing number among Clio's practitioners, now free from the formalistic and evolutionary emphasis of the nineteenth century institutionalist, trying to develop a new kind of institutional history, one concerned with structure, process and manipulative procedures.⁶

The institutional economists have done yeoman service in the field of labor history. Their shortcomings are more the fault of the historians, who would not venture, down, among the mutes of history, than the fault of the policy conscious economists, the sociologists, and the especially gifted activists in the labor movement who years ago tried to find the way to make the mutes speak.

⁵ Richard T. Ely, *Ground Under Our Feet: An Autobiography* (New York: Macmillan, 1938), 181.

⁶ Higham, *History*, 231-232.

XI

REPORTS

**MINUTES OF THE IRRA 1965 ANNUAL
MEETINGS**

FINANCIAL REPORT

MINUTES OF THE IRRA ANNUAL SPRING EXECUTIVE BOARD MEETING

BUFFALO, NEW YORK, MAY 3, 1965

The IRRA Executive Board met on Monday, May 3, 1965, 6:30 p.m. at the Statler Hilton Hotel in Buffalo. President Edwin Young presided. Present were: Secretary-Treasurer Johnson, Editor Somers; Board Members Barbash, Brown, Hildebrand, Jensen, Levitan, Seidman; and Messrs. A. Bartlett, L. Buckley, C. Dankert, R. Garnier and J. Sherman.

Secretary-Treasurer Johnson reported a complete slate of nominees for office in 1966 had accepted nomination.

The financial and membership report showed an increase of \$4393.59 in cash on hand as of March 31, 1965 over a year ago, and an increase of \$6717.58 over March 31, 1963 (before the dues increase from \$6 to \$8). The increase this year was due largely to a separate mailing of renewal notices and faster collection. Considerable effort had been made to increase membership since the beginning of the year including promotional mailings to nonmembers of the six local chapters whose membership lists were submitted to the Association office. Promotional letters were sent to over 2000 members of the American Arbitration Association, and a partial mailing to 3000 members of the American Sociological Association is in process.

Vernon Jensen pointed out that the Association has been financially able to maintain its present publication schedule of a research volume each year and at the same time keep its annual dues near the bottom of the list of comparable associations.

The request for affiliation of the new local chapter of the Industrial Relations Research Association for Western New York was presented and approved. President Young presented the chapter charter to Alton Bartlett and James Sherman with appropriate ceremony.

Editor Somers reported the good news that the *Labor Law Journal* will publish the Buffalo *Spring Proceedings* in the July issue on the same basis as last year. There is some hope that this arrangement may continue in the future.

Joel Seidman recommended that more leeway be given participants in published paper length, but from the standpoint of equity, the editor ought to establish a higher word limit. Jensen suggested that if

the Association can afford it, higher limits would often result in more worthwhile papers and would lessen the author's pain in being forced to reduce the length of his paper. Bill Whyte's format of one principal paper with two discussants would make it possible to raise the word limit on the papers. It was suggested that a maximum word limit might be set for each session. The Editor indicated that higher word limits would be considered for the next meeting.

Clyde Dankert reported that the galley proof for *Hours of Work* was due from the publisher, and the volume would be out in the fall. He regretted that the publication was to appear later than originally planned. Editorial work had been burdensome because of the number of contributors and differences between the publisher's editor and the Association editorial board. Consultation with editorial chairmen of earlier volumes would be of value. Young named Dankert as a consultant to editors of the next volume.

Johnson set publication date of the Directory for summer or fall of 1966. Questionnaires would be mailed from the Madison office in the fall of 1965. An 8½x11 page size was suggested if offset printing is used.

Publication in 1967 of the International volume was discussed on the basis of an outline of topics and authors submitted by Sol Barkin. The outline was approved, but because it included more chapters than most IRRA volumes, it was noted that shorter chapters would be necessary. No suggestions for additional authors were made.

Topics for the 1968 research volume were discussed: evaluation of the attack on poverty, Sar Levitan's somewhat narrower focus on income-maintenance provisions, a review of the current status of social security, wage supplements, fringe benefits and women in the work force. Discussion centered on the outline for a proposed volume on income maintenance presented by Sar Levitan.

Jack Barbash noted that the suggested topics were heavily in the economics area and suggested consideration of interdisciplinary subjects. Other possible topics were discussed by Vernon Jensen, Joel Seidman and Douglass Brown.

A motion was passed to accept Levitan's suggestions as a basis of the 1968 volume. The possibility of having the board based in Washington for logistic ease was discussed. Suggestions for the editorial board included Herman Miller, Phil Arnow, George Hildebrand and Robert Lampman. President Young agreed to appoint the editorial

board in one month. He requested that additional suggestions for editors and authors be sent to him by the Board members.

The possibilities of reprinting out-of-print IRRA publications were discussed. Nine *Proceedings* and seven research volumes are now out of print or practically out of print. The Johnson Reprint Company would reprint and handle promotion and sales of all IRRA out-of-print volumes on a 15% royalty basis, but the cost of the volumes to members would be relatively high. IRRA would retain copyrights. Barbash requested that it be determined first whether Harpers had retained print type on their out-of-print IRRA publications. The Board agreed that an effort be made to promote sales and handle reprinting from the Madison office, but that the decision on reprinting procedures should be made by the President, Secretary-Treasurer and Editor. If after examining the data on demand, costs, prices, etc., it appears to be a borderline case, then the question should be brought back for decision of the Board in December.

In discussing the plans for the December meeting, Lou Buckley reported that Presidential Luncheon tickets for the meeting in New York would cost \$7, and the New York Hilton would like time and meeting room schedules as soon as possible. The Board agreed that the luncheon meeting should be eliminated and that the President's paper should be presented in a separate afternoon session, in conjunction with the membership meeting, or in an evening session. Young suggested that it be combined with a more meaningful membership meeting to review the Association's policies. Jensen suggested that the combined meeting might precede the evening social hour.

Young announced preliminary program plans for the New York meeting, with emphasis on labor-market changes. One or two sessions of contributed papers will be scheduled. Further publicity will be given to this in the June *Newsletter*; and the President will write to major universities requesting professors to bring the sessions to the attention of their Ph.D. students. A sprinkling of major figures will also be included in these sessions. The format of two morning sessions and one afternoon session was adopted experimentally. It was suggested that good sessions be scheduled at 8:30 a.m. in order to attract interest in them. A joint session with the American Finance Association was in the process of arrangement.

In discussions on the 1966 Spring Meeting in Milwaukee, it was decided to hold the sessions on Friday and Saturday during the first

week in May. President Young would check with Arthur Ross, the President-Elect, in order to clarify the role to be played by the Wisconsin Chapter in arranging the program. It was agreed to follow the suggestion of William Whyte in arranging a joint session with the Society for Applied Anthropology meeting in Milwaukee at the same time. Robert Garnier, president-elect of the Wisconsin Chapter, suggested that stress be placed on labor relations in the public service, an area in which Wisconsin was now doing pioneering work. It was suggested that a dinner meeting would bring out a larger crowd to listen to a speech from a distinguished guest than a luncheon meeting.

The board approved the recommendation that the IRRA take the lead in establishing an International Industrial Relations Research Association. It was suggested that the British *Journal of Industrial Relations* might serve as the journal of the new association if B. C. Roberts and his associates were agreeable. Gerald Somers was asked to canvass key persons abroad for their reaction to the proposal and report his findings to the Board in December.

President Young thanked the members for coming. The meeting was adjourned at 9:35 p.m.

MINUTES OF THE IRRA ANNUAL WINTER EXECUTIVE BOARD MEETING

NEW YORK CITY, DECEMBER 27, 1965

The IRRA Executive Board met at 6:30 p.m., Monday, December 27, 1965, in the New York Hilton Hotel. President Edwin Young presided. Present were: Incoming-President Arthur Ross; President-Elect Neil Chamberlain; Secretary-Treasurer David Johnson; Editor Gerald Somers; Board Members (16) Benjamin Aaron, Frances Bairstow, Gertrude Bancroft, Seymour Brandwein, Douglass V. Brown, George Hildebrand, Vernon Jensen, Everett Kassalow, Sar Levitan, J. Wade Miller, Jr., Frank Pierson, Roy Reynolds, Arthur Saltzman, Joel Seidman, George Shultz, Harold Wilensky; Nominating Committee Chairman George Strauss; Arrangements Committee Chairmen Louis Buckley (New York) and Laurence Corbett (San Francisco).

President Young introduced the president-elect and new board members.

Secretary-Treasurer Johnson reported an increase of 182 more members compared with this time last year. This trend continues the increases of the last five years. Local chapter membership lists had been exchanged with eleven chapters and promotional mailings had been sent to local chapter members who were not national IRRA members. Promotional mailings were made to members of the American Arbitration Association and to a partial list of members of the American Sociological Association (the balance of the ASA list to be mailed early in 1966).

The Secretary-Treasurer reported that the cash position of the Association had continued to improve, with the November 30, 1965 cash balance of \$4,955.43 higher than a year ago. The noted increase in dues payments was partly due to earlier billing (October 1) and would be likely to reflect somewhat adversely on 1966 income. Both of the 1965 volumes had fewer pages than the previous year, with a resultant cost saving.

The results of the annual election were reported by Johnson for the Elections Committee: Neil W. Chamberlain, president-elect, and board members Benjamin Aaron, Frances Bairstow, Seymour Brandwein, Roy R. Reynolds and Harold L. Wilensky. A total of 825 ballots were cast.

The new *IRRA Membership Directory* is scheduled for publication next summer, Johnson reported. Questionnaires were in the mail for delivery before the first of January. The format followed rather closely that of the 1960 edition of the *Directory*.

Johnson indicated that negotiations on the reprinting and merchandising of the out-of-print IRRA volumes had not been concluded, but University Microfilms at the University of Michigan had offered to reprint the 16 publications now out of print at an average price of \$4.30. It remained to be determined whether this sum would include promotional costs, and whether University Microfilms would take the risk of reprinting and marketing these publications when there was no way of assessing the potential market for them. Storage would be a problem in the Madison office if the distribution were handled there.

Requests for affiliation of two new chapters, Central Ohio and Iowa, and for reactivation of Michigan State Chapter were presented and approved.

Editorial Board Member Kassalow reported for Editor Sol Barkin that all of the 1967 International volume chapters were assigned and in progress; the first manuscripts were scheduled to be in by the end of April. Barkin's outline and comments were presented and discussed.

Plans for the 1968 Income Maintenance volume, as tentatively outlined by its editor, Sar Levitan, were discussed at length. Levitan agreed that the present outline was lengthy, but expected some reduction in the number of individual chapters and expected them to focus more fully on fewer areas. Hopefully, younger people would be among the authors selected, but it was agreed that this type of survey would be difficult for younger writers. It was suggested the outline was too broad in emphasis and scope to really be a piece of research, and that a narrower central theme or hypothesis was necessary if it were to be a research volume that might lead to fresh thinking. Other comments included suggestions with regard to other types of income which might be included and other concepts of welfare payments.

It was suggested that the titles of sessions be indicated on the spine of *Annual Proceedings* for purposes of easier reference. It was agreed that the possibility of such indication would be explored.

Topics for the 1969 and future research volumes were suggested and discussed. Among these were: industrial relations theory and structure; focus on the approaching decade of employment, touching on such aspects as job ladders, matching people and jobs, and job satisfaction;

a focus on what is happening to industrial relations institutions; the under-organized: women, farmers, the poor and other groups outside the scope of regular labor unions; organization among employer associations; public employment and professions; income policy and other national labor policies, including voluntary restraints. A specific decision was to be reached at the May meeting.

Somers then reported on the results of his inquiries into the IRRA's role in establishing and supporting an International Industrial Relations Association. On the basis of favorable replies to his inquiries, he recommended that the IRRA join the British Universities Industrial Relations Association and the Institute of International Labour Studies in Geneva in sponsoring the new association, with the latter unit providing the secretariat headquarters in Geneva. Questions were raised concerning a possible conflict with the International Society of Labor Law and Social Legislation, the absence of sponsors other than Anglo-Saxon countries, the role of eastern European countries, and the schedule for the first international conference. A committee composed of Arthur Ross and Gerald Somers was appointed to look into these matters and report back to the Executive Committee at its May meeting. If the recommendations were favorably received at that time, it was anticipated that one or two IRRA representatives would meet in Geneva during the summer to help launch the international association.

The Board was pleased to accept the Detroit Area Chapter's invitation to hold its 1967 Spring Meeting in Detroit.

Nominating Committee Chairman Strauss reported on his committee's choice of a nominee for President-Elect in 1967. The choice was unanimously approved. He suggested that in the future the Nominating Committee should meet before the Executive Board Meeting. He would like the Secretary-Treasurer, with Board approval, to codify rules for the Nominating Committees' use, covering customs and tradition in choice of nominees. He also suggested more promotion for membership among industrial psychologists.

Ross and Johnson reviewed the program and plans for the Milwaukee 1966 Spring Meeting.

Ross requested suggestions for the 1966 December Meetings in San Francisco. Among those forthcoming were: appraisal of the economic opportunity act; international comparisons: institutions, structural trends, increasing government intervention, Christian trade unions; current programs of federal employment and wage policy,

hopefully an annual review program, perhaps jointly held with the AEA; industrial relations in plants where government is the only customer; annual contributed papers sessions, specifically labeled for students; draft of federal labor code, areas of conflict and overlap in labor legislation, NLRB and arbitration; evaluation of the Employment Service; evaluation of the automation report; evaluation of geographical relocation assistance and incentives for employer retraining to ease skill shortages.

Secretary-Treasurer Johnson was re-elected for three more years, with the thanks of the Board for his previous service.

President Young expressed thanks to New York Local Arrangements Chairman Buckley and his committee, noting the great efforts they had made to arrange a successful meeting. Young then expressed the Association's appreciation of their service to retiring Board Members Gertrude Bancroft, Vernon Jensen, Everett Kassalow, J. Wade Miller, Jr., Joel Seidman.

In response to a request that the IRRA make a public statement on the labor dispute at St. John's University, Young restated the IRRA's constitutional prohibition against the Association taking a public stand on policy issues.

The meeting was adjourned at 10:30 p.m.

MINUTES OF THE IRRA MEMBERSHIP MEETING

NEW YORK CITY, DECEMBER 28, 1965

Incoming President Arthur Ross presided at the general membership meeting held following President Edwin Young's presidential address at 4:00 p.m. December 28, 1965. About 200 members were present for the membership meeting.

It was announced that requests for affiliation of two new local chapters, Central Ohio and Iowa, and for reactivation of Michigan State Chapter had been accepted by the Executive Board; that the Board has also accepted the Detroit Area Chapter's invitation to hold the 1967 Spring Meeting in Detroit. The Detroit Chapter is IRRA's largest local chapter and one of its most active. Ross stressed the vital role played by local chapters in other cities in the U. S. and in other countries, stressing the importance of their place in the IRRA.

President Ross presented program and meeting plans for the 1966 Spring Meeting in Milwaukee, May 6-7, which had been arranged largely with the help of Secretary-Treasurer David B. Johnson. He hoped the meeting would interest and attract people who do not ordinarily attend IRRA meetings, and he asked for suggestions for promotional mailing lists.

Ross also urged a good attendance at the 1966 December Meetings which he announced would be held in a "real" San Francisco hotel, the Sir Francis Drake. He named Laurence Corbett, local chapter president, as his local arrangements chairman—to carry on the preliminary work begun last year by Walter Slater, chapter president at that time. Activities would be planned for wives and families of members. Ross announced that his program committee for the San Francisco meeting would include Benjamin Aaron, Irving Bernstein, George Strauss and Harold Wilensky. He indicated that this committee and the local arrangements appointments were among the few political plums he had been able to award to his constituents.

President Ross reported to the membership on the status of forthcoming special volumes. The 1966 *Membership Directory* was scheduled for summer publication, contingent upon the promptness of questionnaire return by members. The 1967 volume on International Labor Relations was well along and would be in the manuscript stage in a few months, according to Editor Sol Barkin's current progress

report. Sar Levitan, chairman of the Editorial Board of the Income Maintenance volume, scheduled for 1968, indicated that he was still open to suggestions for topics and authors for some chapters.

Ross continued his report on the affairs of the Association with a review of the Executive Board's discussion on whether the IRRA should encourage establishment of an International Industrial Relations Association. Questions had been raised as to the possible conflict with existing international organizations. The question was to be pursued further prior to final action by the Executive Board. The views of members are welcomed.

After President Ross finished his report to the membership, he requested their suggestions for the program of the 1966 December Meetings and for subjects for the 1969 research volume. One member suggested that program topics of the meetings should be geared to those of the research volumes, with the meeting providing an extension or further exploration of a topic already pursued in a volume. It was also suggested that the *Newsletter* include a description of the procedure by which one becomes a participant in the annual programs. Another member urged that other language groups be approached early in the establishment of an international association since other national associations already have sizable memberships.

Other comments of members concerned the delayed mailing of IRRA hotel reservation cards and whether anything had been done to require the national membership of local chapter members who were permitted to get the benefits of the IRRA without paying national dues. Secretary-Treasurer Johnson reported that membership lists had been exchanged with local chapters and that during the last year the Association had mailed out 1200 promotional packets to local members who were not also national Association members. No figures were available on the percentage of national IRRA memberships among local chapter members. Johnson stated that the decision of the Executive Board had been to promote and encourage membership in both the national and local organizations rather than to require it. It was pointed out that although local membership provided some benefits, those who were only local members received no IRRA publications, the chief tangible product of the Association.

It was suggested by Bernie Samoff that an IRRA committee be appointed to examine junior and senior high school texts dealing with industrial relations. Consideration should then be given to the preparation of a short paperback text on industrial relations for high school use.

The meeting was adjourned at 5:20 p.m.

AUDIT REPORT

HOUGHTON, TAPLICK & CO.

CERTIFIED PUBLIC ACCOUNTANTS

December 14, 1965

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, 1965. We 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, 1965

Exhibit "B"—Comparative Statement of Cash Receipts and Disbursements for the Fiscal Years Ended November 30, 1965 and November 30, 1964

Exhibit "C"—Bank Reconciliation, November 30, 1965

The available cash resources of the Industrial Relations Research Association on November 30, 1965 totaled \$18,295.11 consisting of \$13,295.11 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 bank and the savings association.

As set forth in Exhibits "A" and "B", the cash receipts for the fiscal year totaled \$29,653.36 and the disbursements totaled \$24,697.93. The receipts exceeded the disbursements by \$4,955.43. The cash receipts for the 1964-65 fiscal year exceeded the cash receipts for the 1963-64 fiscal year by \$4,119.19. The increase is primarily due to the membership dues increase resulting from an increase in number of memberships for the fiscal year. The cash disbursements for the 1964-65 fiscal year increased from the cash disbursements for the 1963-64 fiscal year by \$1,913.76.

The cash receipts journal was footed by us for the entire year. All cancelled checks returned by the bank during the year were examined by us and traced to the disbursement journal. The cash disbursements journal was also footed for the year. The source information of dues income was tested for a portion of the year.

In our opinion the accompanying statement of cash receipts and disbursements presents fairly the cash transactions of the Industrial Relations Research Association for the fiscal year ended November 30, 1965.

Respectfully submitted,
HOUGHTON, TAPLICK & Co.
Certified Public Accountants

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION
Madison, Wisconsin

COMPARATIVE STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
Fiscal Years Ended November 30, 1965 and November 30, 1964

	Year Ended 11-30-65	Year Ended 11-30-64	Increase	Decrease
Cash Receipts :				
Membership Dues	\$21,023.00	\$16,947.79	\$4,075.21	\$
Subscriptions	2,080.00	1,424.00	656.00	
Sales	2,066.52	22,151.16		148.64
Royalties	396.34	756.50		360.16
Mailing List	340.00	570.00		230.00
Travel, Conference & Meetings	3,537.75	3,417.42	120.33	
Interest Income	200.00	200.00		
Miscellaneous	9.75	3.30	6.45	
Totals	<u>\$29,653.36</u>	<u>\$25,534.17</u>	<u>\$4,119.19</u>	
Cash Disbursements :				
Salaries & Social Security	\$ 5,088.82	\$ 4,358.88	\$ 729.94	
Printing	1,715.76	1,345.17	370.59	
Postage	1,480.68	1,056.12	424.56	
Services & Supplies	1,093.81	963.64	130.17	
Publications	12,199.49	12,005.05	194.44	
I.R.R.A. Conference & Meeting Expense	2,989.73	2,980.20	9.53	
Miscellaneous	32.16	32.09	.07	
Telephone & Telegraph	97.48	43.02	54.46	
Totals	<u>\$24,697.93</u>	<u>\$22,784.17</u>	<u>\$1,913.76</u>	
Excess of Receipts over Disbursements	\$ 4,955.43	\$ 2,750.00	\$2,205.43	
Add: Beginning Bank Balance	<u>8,339.68</u>	<u>5,589.68</u>	<u>2,750.00</u>	
Bank Balance, End of Year	\$13,295.11	\$ 8,339.68	\$4,955.43	
Home Savings & Loan Certificate # 3384 Purchased in 1954	5,000.00	5,000.00		
Available Cash Resources	<u>\$18,295.11</u>	<u>\$13,339.68</u>	<u>\$4,955.43</u>	

XII

INDEX TO IRRA PUBLICATIONS 1961-1965*

Subject Classifications

Subject Index of Contributions

Author Index

IRRA Publications List and Major Topics,
1961-1965

INDUSTRIAL RELATIONS
RESEARCH ASSOCIATION
Social Science Building,
Madison, Wisconsin 53706

*The Index for the period, 1948-1960, is included in the
THIRTEENTH ANNUAL PROCEEDINGS (1960).

INDEX TO IRRA PUBLICATIONS, 1961-1965

	page
SUBJECT CLASSIFICATIONS	
LABOR-MANAGEMENT RELATIONS	371
Collective Bargaining	
Cooperation	
Labor Disputes	
Arbitration	
LABOR ECONOMICS	374
Manpower and Employment	
Wages and Hours	
Productivity and Technology	
Discrimination in Employment	
LABOR ORGANIZATIONS	378
History and Theory	
Organization, Structure and Administration	
Jurisdiction	
Labor and Politics	
Labor Abroad	
GOVERNMENT AND LABOR	380
Government and Disputes Settlement	
Government and Internal Union Affairs	
EMPLOYEE WELFARE	382
Unemployment Compensation	
Social Security	
The Older Worker	
RESEARCH AND EDUCATION	383

SUBJECT INDEX OF CONTRIBUTIONS 1961-1965

LABOR-MANAGEMENT RELATIONS

520. AUTOMATION AND THE FUTURE, Nicholas Kelley, 14th Ann., '61, pp. 300-305.
521. HANDLING GRIEVANCES IN A NON-UNION PLANT, Walter V. Ronner, 14th Ann., '61, pp. 306-314.
522. THE AMERICAN MOTORS-*UAW* PROGRESS SHARING AGREEMENT, Edward L. Cushman, 14th Ann., '61, pp. 315-324.
523. Discussion: SOME MANAGEMENT POLICIES AND THEIR MEANING FOR TODAY, Charles C. Killingsworth, Charles A. Myers, William Gomberg, 14th Ann., '61, pp. 325-328, 328-330, 330-331.
524. THE DYNAMICS OF INDUSTRIAL RELATIONS IN EARLY JAPANESE DEVELOPMENT, Koji Taira, Spring, '62, pp. 483-492.
525. THE NEW INDUSTRIAL RELATIONS IN BRITAIN, Arthur M. Ross, Spring, '62, pp. 492-501.
526. PANEL DISCUSSION: INDUSTRIALISM AND INDUSTRIAL MAN, Russell A. Smith, pp. 575-578; Frederick Harbison, pp. 578-579; Solomon B. Levine, pp. 579-582; William Gomberg, pp. 582-583; Joseph A. Raffaele, pp. 583-589; Bruce H. Millen, pp. 589-590, Spring, '62.
527. NEW LABOR RELATIONS POLICIES AND REMEDIES SUGGESTED BY DIFFERENT INDUSTRIAL SETTINGS, Solomon Barkin, 15th Ann., '62, pp. 220-236.
528. LABOR ON UNITED STATES AND CANADIAN RAILROADS: FINDINGS OF THE PRESIDENTIAL RAILROAD COMMISSION, Philip Arnow, Spring, '63, pp. 677-685.
529. UNION-MANAGEMENT RELATIONS IN THE CONSTRUCTION INDUSTRY—THE OUTLOOK IN ONTARIO, John H. G. Crispo, Spring, '63, pp. 708-716.
530. MODEL INDUSTRIAL RELATIONS SYSTEMS, John P. Windmuller, 16th Ann., '63, pp. 60-75.
531. THE IMPACT OF TECHNOLOGY ON LABOR-MANAGEMENT RELATIONS, Jack Barbash, Vol. XII, Adjusting to Technological Change, '63, pp. 44-60.
532. SOME EMERGING TRENDS IN OVERSEAS INDUSTRIAL RELATIONS, George Dickover, 17th Ann., '64, pp. 81-86.
533. Discussion: INDUSTRIAL RELATIONS POLICIES OF AMERICAN CORPORATIONS ABROAD, Everett M. Kassalow, Winston Oberg, 17th Ann., '64, pp. 87-90, 90-95.
534. LABOR PARTICIPATION IN MANAGEMENT: SOME IMPRESSIONS OF EXPERIENCE IN THE METAL WORKING INDUSTRIES OF BRITAIN, ISRAEL AND THE UNITED STATES, Milton Derber, 17th Ann., '64, pp. 261-269.
535. INDUSTRIAL DEMOCRACY IN THE AFFLUENT SOCIETY, Adolph Sturmthal, 17th Ann., '64, pp. 270-279.
536. THE WORKS COUNCILS IN WESTERN EUROPE: AIMS AND RESULTS, Mark van de Vall, 17th Ann., '64, pp. 280-291.
537. DEFINING NEW SOLUTIONS: A COMMENTARY ON THE ANNUAL MEETING, Solomon Barkin, 17th Ann., '64, pp. 294-307.
538. CONCEPT ANALYSIS IN INDUSTRIAL RELATIONS, Milton Derber, Chrm., 18th Ann., '65, pp. 162-165.

539. THE ANALYTIC MEANING OF SENIORITY, Frederic Meyers, 18th Ann., '65, pp. 194-202.
540. THE EXTENDED MEANING AND DIMINISHED RELEVANCE OF "JOB CONSCIOUS" UNIONISM, Abraham Siegel, 18th Ann., '65, pp. 166-182.

*Collective Bargaining**

541. THE WORK RULES AND WORK PRACTICES PROBLEM, William Gomberg, Spring, '61, pp. 643-654.
542. THE USE OF TRIPARTITE BODIES TO SUPPLEMENT COLLECTIVE BARGAINING, George H. Hildebrand, Spring, '61, pp. 655-664.
543. LOGIC AND MEANING OF WORK RULES ON THE RAILROADS, Jacob K. Kaufman, 14th Ann., '61, pp. 378-388.
544. THE GENERAL PROBLEM OF WORK RULES, E. Robert Livernash, 14th Ann., '61, pp. 389-398.
545. WORK RULES AND PRACTICES IN MASS PRODUCTION INDUSTRIES, Jack Stieber, 14th Ann., '61, pp. 399-412.
546. Discussion: THE EVOLUTION OF WORK RULES AND THEIR EFFECTS ON EMPLOYMENT, William Gomberg, David Kaplan, Garth L. Mangum, 14th Ann., '61, pp. 413-416, 416-420, 420-423.
547. A THEORY OF THE ORIGIN AND DEVELOPMENT OF EMPLOYER ASSOCIATIONS, Kenneth M. McCaffree, 15th Ann., '62, pp. 56-68.
548. INFLUENCES OF EMPLOYER BARGAINING ASSOCIATIONS IN MANUFACTURING FIRMS, Max S. Wortman, Jr., 15th Ann., '62, pp. 69-82.
549. NATIONAL ASSOCIATION BARGAINING IN THE LITHOGRAPHIC INDUSTRY, Fred Munson, 15th Ann., '62, pp. 83-91.
550. Discussion: THE IMPACT OF EMPLOYER ASSOCIATIONS UPON INDUSTRIAL RELATIONS, Martin Segal, Jack Stieber, 15th Ann., '62, pp. 92-95, 95-98.
551. RECORD OF COLLECTIVE BARGAINING IN THE LAST 25 YEARS, John Herling, 15th Ann., '62, pp. 186-201.
552. NEW PROBLEMS FOR COLLECTIVE BARGAINING, Leonard Woodcock, 15th Ann., '62, pp. 202-207.
553. THE OBLIGATION TO BARGAIN IN GOOD FAITH, Robben W. Fleming, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 60-87.
554. COLLECTIVE BARGAINING AND THE ANTITRUST LAWS, George H. Hildebrand, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 152-181.
555. Discussion: THE DIESEL-FIREMEN ISSUE—A COMPARISON OF TREATMENT, Morris A. Horowitz, Spring, '63, pp. 694-699.
556. COLLECTIVE BARGAINING AND THE PUBLIC INTEREST, Roger Chartier, Spring, '63, pp. 733-738.
557. COLLECTIVE BARGAINING STRATEGIES AND TACTICS IN THE FEDERAL CIVIL SERVICE, Max S. Wortman, Jr., Spring, '64, pp. 484-492.
558. IS THE AMERICAN COLLECTIVE BARGAINING SYSTEM OBSOLETE? Nathan Feinsinger, 17th Ann., '64, pp. 156-159.

* See also: 742

- 558a. Discussion: INDUSTRIAL RELATIONS IN 1975—COLLECTIVE BARGAINING, B. C. Roberts, George Shultz, Frederick Harbison, David L. Cole, 17th Ann., '64, pp. 160-162, 162-163, 163-169.
559. THE CONCEPT OF BARGAINING IN INDUSTRIAL RELATIONS, Myron L. Joseph, 18th Ann., '65, pp. 183-193.
560. THE INFLUENCE OF COLLECTIVE BARGAINING ON HOURS, Richard L. Rowan, Vol. XIV, Hours of Work, '65, pp. 17-35.

*Cooperation**

561. THE *ILWU-PMA* MECHANIZATION AND MODERNIZATION AGREEMENT, Lincoln Fairley, Spring, '61, pp. 664-680.
562. THE *ILWU-PMA* MECHANIZATION AND MODERNIZATION AGREEMENT: AN EXPERIMENT IN INDUSTRIAL RELATIONS, Wayne L. Horvitz, 16th Ann., '63, pp. 22-33.
563. THE *ILWU-PMA* MECHANIZATION AND MODERNIZATION AGREEMENT: AN EVALUATION OF EXPERIENCE UNDER THE AGREEMENT: THE UNION'S VIEWPOINT, Lincoln Fairley, 16th Ann., '63, pp. 34-47.
564. THE KAISER STEEL-UNITED STEELWORKERS OF AMERICA LONG RANGE SHARING PLAN, Gerard E. Balsley, 16th Ann., '63, pp. 48-58.
565. COOPERATIVE APPROACHES TO PROBLEMS OF TECHNOLOGICAL CHANGE, Charles C. Killingsworth, Vol. XII, Adjusting to Technological Change, '63, pp. 61-94.
566. THE PROSPECTS OF FORMAL UNION-MANAGEMENT COOPERATION, Melville Dalton, 17th Ann., '64, pp. 252-260.

*Labor Disputes**

567. ECONOMIC INSTABILITY AND INDUSTRIAL CONFLICT—THE CONSTRUCTION INDUSTRY IN BRITISH COLUMBIA, Stuart Jamieson, Spring, '63, pp. 717-727.
568. Discussion: LABOUR RELATIONS POLICY AND THE BUILDING TRADES IN CANADA, Peter Stevens, Spring, '63, pp. 727-730.
569. Discussion: LABOUR RELATIONS POLICY AND THE BUILDING TRADES IN CANADA, Gordon Blake, Spring, '63, pp. 730-732.
570. SPECIAL GOVERNMENT DISPUTE SETTLEMENT PANELS—FOUR VIEWS, H. T. Herrick, Paul L. Styles, T. E. Lane, P. L. Siemiller, Spring, '64, pp. 405-413, 413-416, 417-419, 419-423.

Arbitration

571. CANADIAN POLICY EXPERIMENTS WITH PUBLIC-INTEREST DISPUTES, H. D. Woods, Spring, '63, pp. 739-745.
572. PUBLIC INTEREST DISPUTES AND THEIR SETTLEMENT: OBSERVATIONS ON THE UNITED STATES EXPERIENCE, Benjamin Aaron, Spring, '63, pp. 746-752.
573. Discussion: PUBLIC-INTEREST DISPUTES AND THEIR SETTLEMENT, Bora Laskin, Spring, '63, pp. 752-755.

* See also: 522

* See also: 521

LABOR ECONOMICS

574. NATIONAL WAGE PAYMENTS AND THE INTERNATIONAL BALANCE OF PAYMENTS, F. A. Breier, Spring, '62, pp. 479-483.
575. LABOR-MANAGEMENT RELATIONS AND THE BALANCE OF INTERNATIONAL PAYMENTS, George W. Taylor, Spring, '62, pp. 501-507.
576. LABOR MONOPOLY POLICY RECONSIDERED, Simon Rottenberg, 15th Ann., '62, pp. 274-282.
577. AGENDA FOR WAGE-PRICE POLICY, Frank C. Pierson, 15th Ann., '62, pp. 283-293.
578. Discussion: PUBLIC POLICY TOWARD THE LABOR MARKET, John T. Dunlop, Walter Froehlich, William H. Peterson, 15th Ann., '62, pp. 294-297, 297-301, 301-304.
579. THE INTERPLANT TRANSFER OF DISPLACED EMPLOYEES, Arnold R. Weber, Vol. XII, Adjusting to Technological Change, '63, pp. 95-143.
580. THE ARMOUR EXPERIENCE: A CASE STUDY IN PLANT SHUTDOWN, Edwin Young, Vol. XII, Adjusting to Technological Change, '63, pp. 144-158.
581. BENEFIT-COST ANALYSIS OF WELFARE PROGRAMS, John S. MacDonald, 17th Ann., '64, pp. 186-194.
582. CAPITAL-OUTPUT ANALYSIS OF HOUSING PROGRAMS FOR DEVELOPING NATIONS, Leland Burns, 17th Ann., '64, pp. 195-202.

*Manpower and Employment**

583. THE MIGRATORY WORKER IN THE FARM ECONOMY, Louis Levine, Spring, '61, pp. 622-630.
584. UNEMPLOYMENT STATISTICS FOR FISCAL AND MONETARY POLICY, Stanley Lebergott, 14th Ann., '61, pp. 16-27.
585. PROBLEMS AND REMEDIES FOR DEPRESSED AREA UNEMPLOYMENT, William H. Miernyk, 14th Ann., '61, pp. 28-36.
586. WILL ECONOMIC GROWTH SOLVE THE PROBLEM OF LONG-TERM UNEMPLOYMENT? Richard C. Wilcock, Walter H. Franke, 14th Ann., '61, pp. 37-49.
587. Discussion: PROBLEMS OF PERSISTENT UNEMPLOYMENT, George H. Borts, Robert J. Lampman, John G. Turnbull, 14th Ann., '61, pp. 50-52, 52-55, 55-58.
588. LABOR MARKET BEHAVIOR AND THE RELATIONSHIP BETWEEN UNEMPLOYMENT AND WAGES, Philip Ross, 14th Ann., '61, pp. 275-288.
589. COMPETITION BETWEEN THE INSIDE AND OUTSIDE LABOR FORCE FOR THE WORK OF THE INDUSTRIAL FIRM, Margaret K. Chandler, 14th Ann., '61, pp. 334-345.
590. TRENDS IN PUBLIC EMPLOYMENT, Daniel H. Kruger, 14th Ann., '61, pp. 354-366.
591. Discussion: THE LABOR FORCE IN SPECIAL INDUSTRIES: ITS CHARACTER AND PROBLEMS, Joseph P. Goldberg, Herbert G. Heneman, Jr., Herman M. Somers, 14th Ann., '61, pp. 367-370, 370-373, 373-376.

* See also: 743, 744

592. PUBLIC EMPLOYMENT SERVICE OPERATIONS IN A CLERICAL LABOR MARKET, Eaton H. Conant, 15th Ann., '62, pp. 306-314.
593. SOME CONCEPTUAL AND METHODOLOGICAL CONSIDERATIONS IN THE STUDY OF JOB DISLOCATION, Louis A. Ferman, 15th Ann., '62, pp. 315-324.
594. SOME SOCIAL PSYCHOLOGICAL CORRELATES OF A DEPRESSED AREA, Lawrence K. Williams, F. F. Foltman, Ned A. Rosen, 15th Ann., '62, pp. 325-338.
595. Discussion: BALANCED AND DEPRESSED LABOR MARKETS, Harold L. Sheppard, Richard C. Wilcock, 15th Ann., '62, pp. 339-341, 341-343.
596. THE EFFECTS OF UNIONS ON THE ALLOCATION OF LABOR, H. Gregg Lewis, 16th Ann., '63, pp. 104-115.
597. LABOR MOBILITY AND WAGE INFLEXIBILITY, Robert L. Raimon, 16th Ann., '63, pp. 116-129.
598. Discussion: EFFICIENCY IN THE LABOR MARKETS, William G. Bowen, George H. Hildebrand, 16th Ann., '63, pp. 139-141, 141-148.
599. FACTORS AFFECTING RETRAINING IN WEST VIRGINIA, Harold A. Gibbard, Spring, '64, pp. 424-430.
600. THE APPALACHIAN DEVELOPMENT PROGRAM, John D. Whisman, Spring, '64, pp. 430-437.
601. THE EFFECTS OF CULTURE ON RETRAINING IN THE SOUTH, J. Earl Williams, Spring, '64, pp. 437-450.
602. REDUCING UNEMPLOYMENT: PROBLEMS AND POLICIES, George H. Hildebrand, Spring, '64, pp. 477-485.
603. RETRAINING PROGRAMS AT HOME AND ABROAD, Margaret Gordon, 17th Ann., '64, pp. 128-138.
604. AREA REDEVELOPMENT PROGRAMS AT HOME AND ABROAD, William Miernyk, 17th Ann., '64, pp. 139-148.
605. Discussion: EVALUATION OF NATIONAL MANPOWER POLICIES, Sar A. Levitan, J. S. Zeisel, 17th Ann., '64, pp. 149-152, 152-154.
606. BENEFIT-COST ANALYSIS OF MANPOWER RETRAINING, Gerald G. Somers, Ernst Stromsdorfer, 17th Ann., '64, pp. 172-185.
607. Discussion: MANPOWER AND WELFARE PROGRAMS: BENEFIT-COST ANALYSIS, Juanita Kreps, Selma Mushkin, Benson Soffer, 17th Ann., '64, pp. 203-206, 206-210, 210-214.
608. CRITICAL ISSUES IN AMERICAN MANPOWER POLICY AND PRACTICE, Frederick Harbison, 17th Ann., '64, pp. 216-229.
609. Discussion: INDUSTRIAL RELATIONS IN 1975—MANPOWER POLICIES, Garth L. Mangum, Nathan Goldfinger, Frank H. Cassell, George Shultz, Seymour Brandwein, 17th Ann., '64, pp. 230-233, 233-237, 237-242, 242-247, 247-250.
610. DISCUSSION ON REDUCING UNEMPLOYMENT, Clyde E. Dankert, Spring, '65, pp. 485-487.
611. COMMENTS ON REDUCING UNEMPLOYMENT, Robert R. France, Spring, '65, pp. 488-490.
612. COMMENTS ON REDUCING UNEMPLOYMENT: A TRIAL ANALYTIC FRAMEWORK, Alton C. Bartlett, Spring, '65, pp. 488-490.
613. MANPOWER NEEDS AND EDUCATIONAL POLICY, Pres. Address, Edwin Young, 18th Ann., '65, pp. 2-7.
614. LABOR FORCE AND OCCUPATIONAL PROJECTIONS, W. Lee Hansen, 18th Ann., '65, pp. 10-20.

615. Discussion: THE U.S. MANPOWER FUTURE, Herbert E. Striner, Sol Swerdloff, Thomas F. Dernburg, 18th Ann., '65, pp. 21-25, 25-28, 28-30.
616. THE ROLE AND LIMITS OF MANPOWER POLICIES, Arnold Weber, 18th Ann., '65, pp. 32-50.
617. Discussion: MANPOWER POLICIES AND PROGRAMS, Keith Prouty, Richard Lester, Jerome M. Rosow, Melvin Rothbaum, 18th Ann., '65, pp. 51-55, 55-58, 58-61, 61-65.
618. THE IMPACT OF MASS LAYOFFS, July 1963-June 1965, Robert F. Smith, 18th Ann., '65, pp. 204-219.
619. THE USE OF LABOR FORCE PARTICIPATION AND UNEMPLOYMENT RATES AS A TEST FOR STRUCTURAL DIFFICULTIES, William H. Gruber, 18th Ann., '65, pp. 220-232.
620. HARD-CORE UNEMPLOYMENT IN DETROIT: CAUSES AND REMEDIES, Howard M. Wachtel, 18th Ann., '65, pp. 233-241.
621. Discussion: UNEMPLOYMENT IN A CHANGING LABOR MARKET, Louis Levine, 18th Ann., '65, pp. 242-247.
622. LABOR MARKET ADJUSTMENT AND INTERNAL TRAINING, Peter B. Doeringer, Michael J. Piore, 18th Ann., '65, pp. 250-263.
623. INTERACTIONS OF EXTERNAL AND INTERNAL LABOR MARKETS FOR ENGINEERS AND SCIENTISTS, John E. Parker, 18th Ann., '65, pp. 264-275.
624. THE INFORMATION SYSTEM IN CHANGING LABOR MARKETS, Joseph C. Ullman, David P. Taylor, 18th Ann., '65, pp. 276-289.
625. Discussion: INFORMATION, MOBILITY AND ADJUSTMENTS IN A CHANGING LABOR MARKET, Robert L. Aronson, 18th Ann., '65, pp. 290-296.

*Wages and Hours**

626. WORKER QUALITY AND WAGE DISPERSION: AN ANALYSIS OF A CLERICAL LABOR MARKET IN BOSTON, Robert Evans, Jr., 14th Ann., '61, pp. 246-259.
627. INDUSTRY AND NATIONAL WAGE LEVELS UNDER BIG UNIONISM, Frank C. Pierson, 14th Ann., '61, pp. 260-274.
628. Discussion: THE BEHAVIOR OF WAGES IN SPECIAL AND ADMINISTERED LABOR MARKETS, William G. Bowen, Mark W. Leiserson, Robert B. McKersie, 14th Ann., '61, pp. 289-291, 292-294, 294-298.
629. THE REDUCTION IN HOURS, Herbert R. Northrup, Vol. XIV, Hours of Work, '65, pp. 1-16.
630. THE INFLUENCE OF LEGISLATION ON HOURS, Ray Marshall, Vol. XIV, Hours of Work, '65, pp. 36-53.
631. HOURS OF WORK IN CANADA, W. R. Dymond and George Saunders, Vol. XIV, Hours of Work, '65, pp. 54-75.
632. HOURS OF WORK AND MOONLIGHTING, Paul E. Mott, Vol. XIV, Hours of Work, '65, pp. 76-94.
633. THE ECONOMICS OF OVERTIME, Frederic Meyers, Vol. XIV, Hours of Work, '65, pp. 95-110.
634. SHIFT WORK AND THE SHORTER WORKWEEK, Floyd C. Mann, Vol. XIV, Hours of Work, '65, pp. 111-127.
635. AUTOMATION, RATIONALIZATION, AND URBANIZATION:

* See also: 734

- HOURS OF WORK IN THE OFFICE, Dean F. Berry, Vol. XIV, Hours of Work, '65, pp. 128-146.
636. HOURS AND OUTPUT, David G. Brown, Vol. XIV, Hours of Work, '65, pp. 147-160.
637. AUTOMATION, UNEMPLOYMENT, AND SHORTER HOURS, Clyde E. Dankert, Vol. XIV, Hours of Work, '65, pp. 161-178.

*Productivity and Technology**

638. MANPOWER IMPLICATIONS OF TECHNOLOGICAL CHANGE: RESEARCH FINDINGS OF THE UNITED STATES DEPARTMENT OF LABOR, Seymour Brandwein, Spring, '63, pp. 655-661.
639. MANPOWER IMPLICATIONS OF TECHNOLOGICAL CHANGE IN CANADA, John P. Francis, Spring, '63, pp. 661-669.
640. RESEARCH ON MANPOWER IMPLICATIONS OF TECHNOLOGICAL CHANGE: A DISCUSSION, Gerald G. Somers, Spring, '63, pp. 669-676.
641. NEW TECHNOLOGIES AND CHANGING MANPOWER REQUIREMENTS IN CANADIAN RAILROADS, Phillip Cohen, Spring, '63, pp. 685-693.
642. THE FEATHERBEDDING PROBLEM, Paul A. Weinstein, 16th Ann., '63, pp. 130-138.
643. GAINS AND COSTS OF TECHNOLOGICAL CHANGE, Walter Buckingham, Vol. XII, Adjusting to Technological Change, '63, pp. 1-26.
644. ORGANIZED LABOR AND TECHNICAL CHANGE: A BACKWARD LOOK, Philip Taft, Vol. XII, Adjusting to Technological Change, '63, pp. 27-43.
645. TECHNOLOGICAL CHANGE AND THE COMMUNITY, Sar A. Levitan, Harold L. Sheppard, Vol. XII, Adjusting to Technological Change, '63, pp. 159-189.
646. POLICY IMPLICATIONS OF TECHNOLOGICAL CHANGE IN WESTERN EUROPE, Bertil Olsson, Vol. XII, Adjusting to Technological Change, '63, pp. 190-205.
647. ADJUSTING TO TECHNOLOGICAL CHANGE: CONCLUSIONS, Gerald G. Somers, Edward L. Cushman, Nat Weinberg, eds., Vol. XII, Adjusting to Technological Change, '63, pp. 206-220.
648. ADJUSTMENT TO TECHNOLOGICAL CHANGE IN A REGULATED GROWTH INDUSTRY, Mark L. Kahn, 18th Ann., '65, pp. 124-138.
649. TECHNOLOGY AND THE LABOR FORCE IN THE OFFSHORE MARITIME INDUSTRY, Aaron Warner, 18th Ann., '65, pp. 139-150.
650. Discussion: ADJUSTMENTS TO TECHNOLOGICAL CHANGE, Garth Mangum (chrm.), R. Thayne Robson, Robert S. Bowers, John R. Coleman, 18th Ann., '65, pp. 120-123, 151-153, 154, 157, 157-159.

Discrimination in Employment

651. THE JOB AHEAD FOR THE PRESIDENT'S COMMITTEE ON EQUAL EMPLOYMENT OPPORTUNITY, Jerry R. Holleman, Spring, '61, pp. 618-621.
652. SOME FACTORS INFLUENCING UNION RACIAL PRACTICES, Ray Marshall, 14th Ann., '61, pp. 104-119.

* See also: 520, 531, 565, 635, 636, 637

653. GOVERNMENTAL FAIR EMPLOYMENT AGENCIES: AN APPRAISAL OF FEDERAL AND STATE AND MUNICIPAL EFFORTS TO END JOB DISCRIMINATION, Paul H. Norgren, 14th Ann., '61, pp. 120-138.
654. Discussion: EMPLOYMENT PROBLEMS OF RACIAL MINORITIES, John Hope II, Rev. Jerome Toner, Emory Via, 14th Ann., '61, pp. 139-143, 144-146, 147-150.
655. THE IMPACT OF RACE RELATIONS ON INDUSTRIAL RELATIONS IN THE SOUTH, John H. Wheeler, Spring, '64, pp. 474-481.
656. EQUAL EMPLOYMENT OPPORTUNITY: PROBLEMS AND PROSPECTS, Ray Marshall, Spring, '65, pp. 453-468.
657. REMARKS ON EQUAL EMPLOYMENT OPPORTUNITIES, Robert B. McKersie, Spring, '65, pp. 468-473.
658. DISCUSSION ON EQUAL EMPLOYMENT OPPORTUNITIES, Eric Polisar, Spring, '65, pp. 473-476.

LABOR ORGANIZATIONS

659. LABOR PROBLEMS IN THE MERCHANT MARINE, Elmo P. Hohman, 14th Ann., '61, pp. 346-353.
660. THE UNION SECURITY ISSUE, Paul E. Sultan, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 88-120.

History and Theory

661. REFLECTIONS ON THE PRESENT STATE OF THE LABOR MOVEMENT, Pres. Address, Philip Taft, 14th Ann., '61, pp. 3-14.
662. THE RELEVANCE OF LABOR HISTORY TO INDUSTRIAL RELATIONS, George W. Brooks, 14th Ann., '61, pp. 206-213.
663. THE SENSE OF HISTORY AND THE ANNALS OF LABOR, Maurice F. Neufeld, 14th Ann., '61, pp. 214-226.
664. Discussion: WHAT CAN LABOR HISTORY CONTRIBUTE TO AN UNDERSTANDING OF INDUSTRIAL RELATIONS? Albert A. Blum, Abraham J. Siegel, 14th Ann., '61, pp. 238-241, 241-243.
665. THE SOURCES FOR FUTURE GROWTH AND DECLINE IN AMERICAN TRADE UNIONS, Joel Seidman, 17th Ann., '64, pp. 98-108.
666. Discussion: INDUSTRIAL RELATIONS IN 1975—TRADE UNIONS, Lloyd Ulman, Julius Rezler, Melvin Rothbaum, Mitchell Sviridoff, 17th Ann., '64, pp. 109-114, 114-119, 119-122, 122-125.
667. SOME PROBLEMS IN THE WRITING OF LABOR HISTORY, Herman Kahn, 18th Ann., '65, pp. 324-332.
668. RECENT LITERATURE IN AMERICAN LABOR HISTORY, Edward Peters, 18th Ann., '65, pp. 333-346.
669. Discussion: LABOR HISTORY, Jerold S. Auerbach, Gerd Korman, 18th Ann., '65, pp. 347-351, 351-354.

Organization, Structure and Administration

670. PROBLEMS OF UNION ORGANIZATION FOR MIGRATORY WORKERS, Franz Daniel, Spring, '61, pp. 636-643.

671. INFLUENCES OF THE ECONOMIC ENVIRONMENT ON THE STRUCTURE OF THE STEEL WORKERS' UNION, Lloyd Ulman, 14th Ann., '61, pp. 227-237.
672. PROSPECTS FOR FUTURE UNION GROWTH—THE UNION LEADERSHIP FACTOR, Jack Barbash, 15th Ann., '62, pp. 208-218.
673. THE PROSPECTS FOR OFFICE EMPLOYEE UNIONISM, Albert A. Blum, 16th Ann., '63, pp. 182-193.
674. SUCCESS AND FAILURE IN ORGANIZING PROFESSIONAL ENGINEERS, James W. Kuhn, 16th Ann., '63, pp. 194-208.
675. PROFESSIONAL ENGINEERS LOOK AT UNIONS, Bernard P. Indik, Bernard Goldstein, 16th Ann., '63, pp. 209-218.
676. THE UNION STAFF INTELLECTUAL IN THE LABOR MOVEMENT, Sylvia B. Gottlieb, 16th Ann., '63, pp. 259-268.
677. THE ORGANIZATIONAL CAMPAIGN IN THE SOCIAL AND CULTURAL CONTEXT OF THE SOUTH, Donald F. Roy, Spring, '64, pp. 451-468.
678. THE PROCESS OF UNIONIZATION IN THE SOUTH, Tony Zivalich, Spring '64, pp. 468-473.
679. INDIVIDUAL JOB RIGHTS AND UNION FUNCTIONS: COMPATIBLE OR CONFLICTING FORCES? Bernard Samoff, 18th Ann., '65, pp. 88-98.
680. LEADERSHIP STRATEGIES FOR ACHIEVING MEMBERSHIP CONSENSUS DURING NEGOTIATIONS, Richard E. Walton, 18th Ann., '65, pp. 99-110.
681. Discussion: THE UNION AS AN ORGANIZATION, William A. Faunce, Bernard Indik, 18th Ann., '65, pp. 114-118.

Jurisdiction

682. JURIDICAL EXTENSION AND THE BUILDING TRADES IN QUEBEC, Gerard Hebert, S. J., Spring, '63, pp. 700-708.

Labor and Politics

683. LIBERALS AND THE LABOR MOVEMENT: THE PARTING OF THE WAYS? Joel Seidman, 16th Ann., '63, pp. 253-258.
684. THE STRUCTURE OF UNION POLITICAL ACTION—A TRIAL ANALYTIC FRAMEWORK, Jack Barbash, Spring, '65, pp. 491-496.

*Labor Abroad**

685. INTERNATIONAL LABOR GROUPS IN THE AMERICAS, Robert J. Alexander, Spring, '62, pp. 507-515.
686. INTERNATIONAL LABOR ORGANIZATION, Rudolph Faupl, Spring, '62, pp. 515-519.
687. WHAT UNITED STATES LABOR AND MANAGEMENT CAN CONTRIBUTE ABROAD, Clark R. Mollenhoff, Spring, '62, pp. 520-524.
688. THE IMPACT OF WESTERN TRADE UNIONISM ON AFRICA, Arnold Zack, Spring, '62, pp. 524-531.
689. THE INTERNATIONAL LABOR SCENE, Arthur J. Goldberg, Spring, '62, pp. 532-535.

* See also: 524, 525, 526, 532, 533, 534, 536

690. THE PUERTO RICAN LABOR MOVEMENT, William H. Knowles, Spring, '62, pp. 536-541.
691. PRESENT DILEMMAS OF THE JAPANESE LABOR MOVEMENT, Bernard Karsh, Solomon B. Levine, Spring, '62, pp. 541-548.
692. THE ITALIAN PAST AND THE FUTURE OF IMPOVERISHED NATIONS, Maurice F. Neufeld, Spring, '62, pp. 548-556.
693. THE HISTADRUT—ADJUSTMENT TO NATIONAL INDEPENDENCE AND ECONOMIC CHANGE, Irvin Sobel, Spring, '62, pp. 556-566.
694. JOB PROTECTION IN FRANCE AND BRITAIN, Frederic Meyers, Spring, '62, pp. 566-575.
695. THE AMERICAN SYSTEM OF INDUSTRIAL RELATIONS: IS IT EXPORTABLE? Pres. Address, Charles A. Myers, 15th Ann., '62, pp. 2-14.
696. HIRING ARRANGEMENTS AND THE RULE MAKING PROCESS IN CERTAIN EUROPEAN PORTS AND IN THE PORT OF NEW YORK, Vernon H. Jensen, 15th Ann., '62, pp. 16-25.
697. GRIEVANCE SETTLEMENT PROCEDURES IN WESTERN EUROPE, William H. McPherson, 15th Ann., '62, pp. 26-35.
698. MIDDLE-WAY APPROACHES TO UNION SECURITY IN SWITZERLAND, CANADA AND COLUMBIA, Michael Dudra, 15th Ann., '62, pp. 36-48.
699. Discussion: COMPARATIVE INTERNATIONAL LABOR STUDIES, Elmo P. Hohman, Everett Kassalow, 15th Ann., '62, pp. 49-51, 51-54.
700. INDUSTRIAL RELATIONS PROBLEMS IN THE DEVELOPING INDIAN ECONOMY: THE TASK POSED BY COMPETING OBJECTIVES, Subbiah Kannappan, 16th Ann., '63, pp. 76-88.
701. THE EXTERNAL IMPACT ON TRADE UNIONS IN DEVELOPING COUNTRIES: THE RECORD IN AFRICA, Elliot J. Berg, 16th Ann., '63, pp. 89-101.
702. THE UNDERDEVELOPED INDUSTRIAL RELATIONS OF U. S. CORPORATIONS IN UNDERDEVELOPED COUNTRIES, John C. Shearer, 17th Ann., '64, pp. 56-66.
703. THE ROLE OF LABOR IN DEVELOPING COUNTRIES, George C. Lodge, 17th Ann., '64, pp. 67-73.
704. CENTRALIZED POLICY DIRECTION OF THE INDUSTRIAL RELATIONS FUNCTION IN AN INTERNATIONAL COMPANY, J. A. Belford, 17th Ann., '64, pp. 74-80.

GOVERNMENT AND LABOR

705. UNION DEMOCRACY AND THE *LMRDA*, John L. Holcombe, Spring, '61, pp. 597-604.
706. THE TEAMSTER MONITORS AND THE ADMINISTRATION OF THE INTERNATIONAL UNION, Sam Romer, Spring, '61, pp. 604-613.
707. Discussion: UNION DEMOCRACY AND THE *LMRDA*, Lester Asher, Spring, '61, pp. 613-615.
708. Discussion: UNION DEMOCRACY AND THE *LMRDA*, I. M. Lieberman, Spring, '61, pp. 615-617.
709. PROPOSED LEGISLATION FOR MIGRATORY WORKERS, Harrison A. Williams, Jr., Spring, '61, pp. 630-636.

710. THE LABOR POLICY OF THE KENNEDY ADMINISTRATION, Lloyd Ulman, 15th Ann., '62, pp. 248-262.
711. Discussion: IMPLICATIONS OF THE REPORT OF PUBLIC INTEREST IN NATIONAL LABOR POLICY, Myron L. Joseph, George P. Shultz, Abraham J. Siegel, 15th Ann., '62, pp. 262-269, 269-272.
712. HISTORICAL EVOLUTION, Douglass V. Brown, Charles A. Myers, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 1-27.
713. EMPLOYER FREE SPEECH: THE SEARCH FOR A POLICY, Benjamin Aaron, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 28-59.
714. THE WEAPONS OF CONFLICT: PICKETING AND BOYCOTTS, Donald H. Wollett, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 121-151.
715. UNITED STATES AND CANADIAN EXPERIENCE: A COMPARISON, Harry D. Woods, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 212-240.

*Government and Disputes Settlement**

716. GOVERNMENT INTERVENTION IN THE SUBSTANTIVE AREAS OF COLLECTIVE BARGAINING, Russell A. Smith, 15th Ann., '62, pp. 237-247.

Government and Internal Union Affairs

717. TRADE UNION GOVERNMENT—CONCEPTS AND PERSPECTIVES, Jack Barbash, 14th Ann., '61, pp. 60-71.
718. *BLMR* FILES AS A RESEARCH SOURCE, Herbert J. Lahne, 14th Ann., '61, pp. 72-81.
719. CRAFT REPRESENTATION IN INDUSTRIAL UNIONS, Arnold R. Weber, 14th Ann., '61, pp. 82-92.
720. Discussion: TRADE UNION GOVERNMENT AND THE EVIDENCE OF LANDRUM-GRIFFIN, W. Ellison Chalmers, Peter Henle, Herbert R. Northrup, 14th Ann., '61, pp. 93-95, 95-98, 98-101.
721. LEGAL REGULATION OF INTERNAL UNION AFFAIRS, Joseph R. Grodin, Vol. XI, Public Policy & Coll. Bargaining, '62, pp. 182-211.
722. EMERGENCE OF CONCERN WITH UNION GOVERNMENT AND ADMINISTRATION, Joel Seidman, Vol. XIII, Regulating Union Government, '64, pp. 1-27.
723. THE POLITICS AND PROVISIONS OF THE LANDRUM-GRIFFIN ACT, Sar A. Levitan, J. Joseph Loewenberg, Vol. XIII, Regulating Union Government, '64, pp. 28-64.
724. THE BUREAU OF LABOR-MANAGEMENT REPORTS: ITS ORGANIZATION, FUNCTIONS, AND ACTIVITIES, John D. Stewart, Vol. XIII, Regulating Union Government, '64, pp. 65-90.
725. COLLECTIVE BARGAINING AND FEDERAL REGULATION OF UNION GOVERNMENT, Benson Soffer, Vol. XIII, Regulating Union Government, '64, pp. 91-129.
726. UNION FINANCE AND *LMRDA*, Emanuel Stein, Vol. XIII, Regulating Union Government, '64, pp. 130-153.
727. TRADE UNION ELECTIONS, Howard Jenkins, Jr., Vol. XIII, Regulating Union Government, '64, pp. 154-195.

* See also: 570, 571, 572, 573

728. SOME COMMENTS ON THE FIRST FOUR YEARS OF *BLMR* RESEARCH AND STATISTICS, Marten S. Estey, Vol. XIII, Regulating Union Government, '64, pp. 196-215.
729. REGULATING UNION GOVERNMENT: CONCLUSION, Philip Taft, Marten S. Estey, Martin Wagner, eds., Vol. XIII, Regulating Union Government, '64, pp. 216-220.

EMPLOYEE WELFARE

730. SOCIAL SERVICES IN RELATION TO INCOME SECURITY: INTRODUCTORY NOTES, Alfred Kahn, 17th Ann., '64, pp. 29-39.
731. PATTERNS OF PENSIONS FUND INVESTMENT, H. Robert Bartell, Jr., 18th Ann., '65, pp. 302-311.
732. MANAGEMENT INTERESTS IN THE INVESTMENT OF PENSION FUNDS, Roger F. Murray, 18th Ann., '65, pp. 312-316.
733. Discussion: UNION AND MANAGEMENT INTERESTS IN THE INVESTMENT OF PENSION FUNDS, Emanuel Stein (chm.), Peter Henle, Leon T. Kendall, 18th Ann., '65, pp. 298-301, 317-318, 319-321.
734. HOURS OF WORK AND THE GENERAL WELFARE, Melvin W. Reder, Vol. XIV, Hours of Work, '65, pp. 179-199.

Unemployment Compensation

735. PROBLEMS OF FINANCING AN ADEQUATE UNEMPLOYMENT INSURANCE PROGRAM IN THE NEXT DECADE, Norman Barcus, 14th Ann., '61, pp. 152-164.
736. UNEMPLOYMENT INSURANCE AND THE CHALLENGE OF THE 1960's, Philip Booth, 14th Ann., '61, pp. 165-177.
737. ABILITY OF THE FEDERAL-STATE UNEMPLOYMENT INSURANCE SYSTEM TO PROVIDE BENEFITS IN TIME OF RECESSION, Fred Slavick, 14th Ann., '61, pp. 178-193.
738. Discussion: IS OUR UNEMPLOYMENT COMPENSATION SYSTEM ADEQUATE TO MEET THE NEEDS OF THE ECONOMY AND THE UNEMPLOYED? Rev. Joseph M. Becker, Arthur F. Burns, Harry F. Stark, 14th Ann., '61, pp. 194-197, 198-200, 200-204.

Social Security

739. SOCIAL SECURITY IN EVOLUTION: TOWARDS WHAT? Eveline M. Burns, 17th Ann., '64, pp. 20-28.
740. Discussion: INDUSTRIAL RELATIONS IN 1975—SOCIAL SECURITY AND SERVICES, Oscar Ornat, Gaston Rimlinger, Margaret Gordon, Richard Lester, 17th Ann., '64, pp. 40-44, 44-49, 49-52, 52-53.

The Older Worker

741. FLEXIBLE VS. COMPULSORY RETIREMENT POLICIES—SOME PRELIMINARY FINDINGS FROM A NATIONAL SURVEY OF COMMERCIAL AND INDUSTRIAL ESTABLISHMENTS, Fred Slavick, John W. McConnell, 15th Ann., '62, pp. 138-153.
742. PROVISIONS AFFECTING OLDER WORKERS IN COLLECTIVE BARGAINING AGREEMENTS, Philip Taft, 15th Ann., '62, pp. 154-162.

743. LABOR MARKET EXPERIENCE OF UNEMPLOYED OLDER WORKERS, Walter H. Franke, 15th Ann., '62, pp. 163-175.
744. Discussion: OLDER WORKERS IN THE LABOR MARKET, William R. Dymond, Irvin Sobel, 15th Ann., '62, pp. 176-179, 179-183.

RESEARCH AND EDUCATION*

745. ON-CAMPUS TEACHING: THE CHANGING NATURE OF UNIVERSITY INDUSTRIAL RELATIONS PROGRAMS, Dale Yoder, 15th Ann., '62, pp. 100-106.
746. ON RESEARCH: THE CHANGING NATURE OF UNIVERSITY INDUSTRIAL RELATIONS PROGRAMS, Milton Derber, Rennard Davis, Gerald Somers, 15th Ann., '62, pp. 107-115.
747. ON LABOR EDUCATION: THE CHANGING NATURE OF UNIVERSITY INDUSTRIAL RELATIONS PROGRAMS, Arthur Carstens, Fred K. Hoehler, Jr., 15th Ann., '62, pp. 116-122.
748. ON MANAGEMENT EDUCATION: THE CHANGING NATURE OF UNIVERSITY INDUSTRIAL RELATIONS PROGRAMS, George S. Odiorne, 15th Ann., '62, pp. 123-127.
749. ON UNIVERSITY PROGRAMS ABROAD: THE CHANGING NATURE OF UNIVERSITY INDUSTRIAL RELATIONS PROGRAMS, John P. Windmuller, 15th Ann., '62, pp. 128-132.
750. ON UNIVERSITY-GOVERNMENT RELATIONS: THE CHANGING NATURE OF UNIVERSITY INDUSTRIAL RELATIONS PROGRAMS, H. D. Woods, 15th Ann., '62, pp. 133-136.
751. TOWARD AN INTEGRATED APPROACH FOR RESEARCH IN ORGANIZATIONAL BEHAVIOR, Pres. Address, William Foote Whyte, 16th Ann., '63, pp. 2-20.
752. A STUDY OF WORK MEASUREMENT, David Sirota, 16th Ann., '63, pp. 155-165.
753. TWO SYSTEMS OF MANAGEMENT: A COMPARISON THAT PRODUCED ORGANIZATIONAL CHANGE, Stuart, M. Klein, 16th Ann., '63, pp. 166-175.
754. RESEARCH FOR ORGANIZATION THEORY AND MANAGEMENT ACTION, INTRODUCTION and CONCLUSION, R. A. Dunnington, 16th Ann., '63, pp. 150-154, 176-179.
755. THE EFFECT OF LABORATORY EDUCATION UPON INDIVIDUAL BEHAVIOR, Douglas R. Bunker, 16th Ann., '63, pp. 220-232.
756. LABOR AND THE ACADEMICIANS, George Strauss, 16th Ann., '63, pp. 234-244.
757. THE INTELLECTUALS AND TRADE UNIONS, Brendan Sexton, 16th Ann., '63, pp. 245-252.
758. A CURRENT FOCUS FOR INDUSTRIAL RELATIONS RESEARCH, Pres. Address, Solomon Barkin, 17th Ann., '64, pp. 2-17.
759. BEHAVIORAL SCIENCE ANALYSIS AND COLLECTIVE BARGAINING RESEARCH, Robert Dubin, Spring, '65, pp. 500-508.
760. COMMENTS ON BEHAVIORAL SCIENCE ANALYSIS AND COLLECTIVE BARGAINING RESEARCH, Carl M. Stevens, Spring, '65, pp. 508-510.

* See also: 593, 612

761. COMMENTS ON BEHAVIORAL SCIENCE ANALYSIS AND COLLECTIVE BARGAINING RESEARCH, Oscar Ornati, Spring, '65, pp. 511-513.
762. THE MANAGER AS A LEARNER, William Dill, 18th Ann., '65, pp. 68-75.
763. MANAGERS—AN IMPROPER SUBJECT FOR THE STUDY OF MANAGEMENT, Fred Goldner, 18th Ann., '65, pp. 76-82.
764. Discussion: CURRENT STATUS OF MANAGEMENT RESEARCH, George Strauss, 18th Ann., '65, pp. 83-86.

AUTHOR INDEX 1961-1965*

- Aaron, Benjamin, 572, 713, ed. Vol. XI
 Alexander, Robert J., 685
 Arnow, Philip, 528
 Aronson, Robert L., 625
 Asher, Lester, 707
 Auerbach, Jerold S., 669

 Balsley, Gerard E., 564
 Barbash, Jack, 531, 672, 684, 717
 Barcus, Norman, 735
 Barkin, Solomon, 527, 537, 758
 Bartell, H. Robert, Jr., 731
 Bartlett, Alton C., 612
 Becker, Rev. Joseph M., 738
 Belford, J. A., 704
 Berg, Elliot J., 701
 Berry, Dean F., 635
 Blake, Gordon, 569
 Blum, Albert A., 664, 673
 Booth, Philip, 736
 Borts, George H., 587
 Bowen, William G., 598, 628
 Bowers, Robert S., 650
 Brandwein, Seymour, 609, 638
 Breier, F. A., 574
 Brooks, George W., 662
 Brown, David G., 636
 Brown, Douglass V., 712
 Buckingham, Walter, 643
 Bunker, Douglas R., 755
 Burns, Arthur F., 738
 Burns, Eveline M., 739
 Burns, Leland, 582

 Carstens, Arthur, 747
 Cassell, Frank H., 609
 Chalmers, W. Ellison, 720
 Chandler, Margaret K., 589
 Chartier, Roger, 556
 Cohen, Phillip, 641
 Cole, David L., 558a
 Coleman, John R., 650
 Conant, Eaton H., 592
 Crispo, John H. G., 529
 Cushman, Edward L., 522, 647, ed.
 Vol. XII

 Dalton, Melville, 566
 Daniel, Franz, 670

 Dankert, Clyde E., 610, 637, ed. Vol.
 XIV
 Davis, Rennard, 746
 Derber, Milton, 534, 538, 746
 Dernburg, Thomas F., 615
 Dickover, George, 532
 Dill, William, 762
 Doeringer, Peter B., 622
 Dubin, Robert, 759
 Dudra, Michael, 698
 Dunlop, John T., 578
 Dunnington, R. A., 754
 Dymond, William R., 631, 744

 Estey, Marten S., 728, 729, ed. Vol.
 XIII
 Evans, Robert, Jr., 626

 Fairley, Lincoln, 561, 563
 Faunce, William A., 681
 Faupl, Rudolph, 686
 Feinsinger, Nathan, 558
 Ferman, Louis A., 593
 Fleming, Robben W., 553
 Foltman, F. F., 594
 France, Robert R., 611
 Francis, John P., 639
 Franke, Walter H., 586, 743
 Froehlich, Walter, 578

 Gibbard, Harold A., 599
 Goldberg, Arthur J., 689
 Goldberg, Joseph P., 591
 Goldfinger, Nathan, 609
 Goldner, Fred, 763
 Goldstein, Bernard, 675
 Gomberg, William, 523, 526, 541, 546
 Gordon, Margaret, 603, 740
 Gottlieb, Sylvia B., 676
 Grodin, Joseph R., 721
 Gruber, William H., 619

 Hansen, W. Lee, 614
 Harbison, Frederick, 526, 558a, 608
 Hebert, Gerard, S. J., 682
 Herling, John, 551
 Hildebrand, George H., 542, 554,
 598, 602
 Heneman, Herbert G., Jr., 591

* Numbers following names of authors refer to numbered contributions listed under the preceding "SUBJECT INDEX OF CONTRIBUTIONS."

- Henle, Peter, 720, 733
 Herrick, H. T., 570
 Hoehler, Fred K., Jr., 747
 Hohman, Elmo P., 659, 699
 Holcombe, John L., 705
 Holleman, Jerry R., 651
 Hope, John, II, 654
 Horowitz, Morris A., 555
 Horvitz, Wayne L., 562

 Indik, Bernard, 675, 681

 Jamieson, Stuart, 567
 Jenkins, Howard, Jr., 727
 Jensen, Vernon H., 696
 Joseph, Myron L., 559, 711

 Kahn, Alfred, 730
 Kahn, Herman, 667
 Kahn, Mark L., 648
 Kannappan, Subbiah, 700
 Kaplan, David, 546
 Karsh, Bernard, 691
 Kassalow, Everett M., 533, 699
 Kaufman, Jacob K., 543
 Kelley, Nicholas, 520
 Kendall, Leon T., 733
 Killingsworth, Charles C., 523, 565
 Klein, Stuart M., 753
 Knowles, William H., 690
 Korman, Gerd, 669
 Kreps, Juanita, 607
 Kruger, Daniel H., 590
 Kuhn, James W., 674

 Lahne, Herbert J., 718
 Laskin, Bora, 573
 Lampman, Robert J., 587
 Lane, T. E., 570
 Lebergott, Stanley, 584
 Leiserson, Mark W., 628
 Lester, Richard, 617, 740
 Levine, Louis, 583, 621
 Levine, Solomon B., 526, 691
 Levitan, Sar A., 605, 645, 723
 Lewis, H. Gregg, 596
 Lieberman, I. M., 708
 Livernash, E. Robert, 544
 Lodge, George C., 703
 Loewenberg, J. Joseph, 723

 MacDonald, John S., 581
 Mangum, Garth L., 546, 609, 650
 Mann, Floyd C., 634, ed. Vol. XIV

 Marshall, Ray, 630, 652, 656
 McCaffree, Kenneth M., 547
 McConnell, John W., 741
 McKersie, Robert B., 628, 657
 McPherson, Wililam H., 697
 Meyers, Frederic, 539, 633, 694
 Miernyk, William H., 585, 604
 Millen, Bruce H., 526
 Mollenhoff, Clark R., 687
 Mott, Paul E., 632
 Munson, Fred, 549
 Murray, Roger F., 732
 Mushkin, Selma, 607
 Myers, Charles A., 523, 695, 712

 Neufeld, Maurice F., 663, 692
 Norgren, Paul H., 653
 Northrup, Herbert R., 629, 720, ed.
 Vol. XIV

 Oberg, Winston, 533
 Odiorne, George S., 748
 Olsson, Bertil, 646
 Ornati, Oscar, 740, 761

 Parker, John E., 623
 Peters, Edward, 668
 Peterson, William H., 578
 Pierson, Frank C., 577, 627
 Piore, Michael J., 622
 Polisar, Eric, 658
 Prouty, Keith, 617

 Raffaele, Joseph A., 526
 Raimon, Robert L., 597
 Reder, Melvin W., 734
 Rezler, Julius, 666
 Rimlinger, Gaston, 740
 Roberts, B. C., 558a
 Robson, R. Thayne, 650
 Romer, Sam, 706
 Ronner, Walter V., 521
 Rosen, Ned A., 594
 Rosow, Jerome M., 617
 Ross, Arthur M., 525
 Ross, Philip, 588
 Rothbaum, Melvin, 617, 666
 Rottenberg, Simon, 576
 Rowan, Richard L., 560
 Roy, Donald F., 677

 Samoff, Bernard, 679
 Saunders, George, 631
 Segal, Martin, 550

- Seidman, Joel, 665, 683, 722
Sexton, Brendan, 757
Shearer, John C., 702
Sheppard, Harold L., 595, 645
Shister, Joseph, ed. Vol. XI
Shultz, George P., 558a, 609, 711
Siegel, Abraham J., 540, 664, 711
Siemiller, P. L., 570
Sirota, David, 752
Slavick, Fred, 737, 741
Smith, Robert F., 618
Smith, Russell A., 526, 716
Sobel, Irvin, 693, 744
Soffer, Benson, 607, 725
Somers, Gerald G., 606, 640, 647,
746, ed. Vol. XII
Somers, Herman M., 591
Stark, Harry F., 738
Stein, Emanuel, 726, 733
Stevens, Carl M., 760
Stevens, Peter, 568
Stewart, John D., 724
Stieber, Jack, 545, 550
Strauss, George, 756, 764
Striner, Herbert E., 615
Stromsdorfer, Ernst, 606
Sturmthal, Adolph, 535
Styles, Paul L., 570
Sultan, Paul E., 660
Summers, Clyde W., ed. Vol. XI
Sviridoff, Mitchell, 666
Swerdloff, Sol, 615

Taft, Philip, 644, 661, 729, 742, ed.
Vol. XIII
Taira, Koji, 524

Taylor, David P., 624
Taylor, George W., 575
Toner, Rev. Jerome, 654
Turnbull, John G., 587

Ulman, Lloyd, 666, 671, 710
Ullman, Joseph C., 624

van de Vall, Mark, 536
Via, Emory, 654

Wachtel, Howard M., 620
Wagner, Martin, 729, ed. Vol. XIII
Walton, Richard E., 680
Warner, Aaron, 649
Weber, Arnold R., 579, 616, 719
Weinberg, Nat, 647, ed. Vol. XII
Weinstein, Paul A., 642
Wheeler, John H., 655
Whisman, John D., 600
Whyte, William Foote, 751
Wilcock, Richard C., 586, 595
Williams, Harrison A., Jr., 709
Williams, J. Earl, 601
Williams, Lawrence K., 594
Windmuller, John P., 530, 749
Wollett, Donald H., 714
Woodcock, Leonard, 552
Woods, H. D., 571, 715, 750
Wortman, Max S., Jr., 548, 557

Yoder, Dale, 745
Young, Edwin, 580, 613

Zack, Arnold, 688
Zeisel, J. S., 605
Zivalich, Tony, 678

IRRA PUBLICATIONS LIST AND MAJOR TOPICS 1961-1965

IRRA publications at the listed prices may be ordered from:
Industrial Relations Research Association,
Madison, Wisconsin 53706.

PROCEEDINGS OF THE 1961 SPRING MEETING, Chicago, May 4-5;
Gerald G. Somers, ed., 86 pp, Out of Print.

Union democracy and the LMRDA; teamster monitors and administration of the international union; the job ahead for the President's Committee on equal employment opportunity; the migratory worker in the farm economy; proposed legislation for migratory workers; problems of union organization for migratory workers; the work rules and work practices problem; use of tripartite bodies to supplement collective bargaining; ILWU-PMA mechanization and modernization agreement.

PROCEEDINGS OF THE FOURTEENTH ANNUAL MEETING, New York, December 28-29, 1961; Gerald G. Somers, ed., 437 pp., Out of Print.

Reflections on the present state of the labor movement; problems of persistent unemployment; trade union government and the evidence of Landrum-Griffin; employment problems of racial minorities; adequacy of our unemployment compensation system; the contribution of labor history to an understanding of industrial relations; the behavior of wages; management policies; the labor force in special industries; the evolution of work rules and their effects on employment.

PUBLIC POLICY AND COLLECTIVE BARGAINING (Volume XI), 1962; Joseph Shister, Benjamin Aaron, Clyde W. Summers, eds., \$4.00, 248 pp., Harper & Brothers.

Historical evolution; employer free speech: the search for a policy; the obligation to bargain in good faith; the union security issue; weapons of conflict; picketing and boycotts; collective bargaining and the antitrust laws; legal regulation of internal union affairs; comparative U.S. and Canadian experience.

PROCEEDINGS OF THE 1962 SPRING MEETING, Philadelphia, May 8-9; Gerald G. Somers, ed., 118 pp., Out of Print.

The international labor scene: national wage payments and the international balance of payments; dynamics of industrial relations in early Japanese development; the new industrial relations in Britain; labor-management relations and the balance of international payments; international labor groups in the Americas; international labor organization; what U.S. labor and management can contribute abroad; the impact of Western trade unionism on Africa; the Puerto Rican labor movement; present dilemmas of the Japanese labor movement; the Italian past and the future of impoverished nations; the Histadrut—adjustment to national independence and economic change; job protection in France and Britain; industrialism and industrial man.

PROCEEDINGS OF THE FIFTEENTH ANNUAL MEETING, Pittsburgh, December 27-28, 1962; Gerald G. Somers, ed., 359 pp., \$4.00.

The American system of industrial relations: is it exportable?; comparative international labor studies; the impact of employer associations upon industrial relations; the changing nature of university industrial relations programs; older workers in the labor market; twenty-five years of industrial relations; implications of the report on public interest in national labor policy; public policy toward the labor market; balanced and depressed labor markets.

ADJUSTING TO TECHNOLOGICAL CHANGE (Volume XII), 1963; Gerald G. Somers, Edward L. Cushman, Nat Weinberg, eds., 230 pp., \$4.50, Harper & Brothers.

Gains and costs of technological change; organized labor and technical change: a backward look; the impact of technology on labor-management relations, cooperative approaches to problems of technological change; inter-plant transfer of displaced employees; the Armour experience: a case study in plant shutdown; technological change and the community; policy implications of technological change in western Europe; conclusions.

PROCEEDINGS OF THE 1963 SPRING MEETING, Montreal, May 6-7; Gerald G. Somers, ed., 100 pp.

Comparative Canadian-U.S. Industrial Relations: manpower implications of technological change; labor on U.S. and Canadian railroads; labour relations policy and the building trades in Canada; collective bargaining and the public interest; public-interest disputes and their settlement.

PROCEEDINGS OF THE SIXTEENTH ANNUAL MEETING, Boston, December 27-28, 1963; Gerald G. Somers, ed., 284 pp., \$4.00.

Toward an integrated approach for research in organizational behavior; new approaches to collective bargaining; comparative international labor studies; efficiency in the labor markets, research for organization theory and management action; unionization of white collar and professional employees; new approaches to management development; liberals and the labor movement.

REGULATING UNION GOVERNMENT (Volume XIII), 1964; Philip Taft, Marten Estey, Martin Wagner, eds., 240 pp., \$4.00, Harper & Row.

Emergence of concern with union government and administration; politics and provisions of the Landrum-Griffin Act; Bureau of Labor-Managements Reports: its organization, functions, and activities; collective bargaining and federal regulation of union government; union finance and LMRDA; trade union elections; some comments on the first four years of BLMR research and statistics; conclusion.

PROCEEDINGS OF THE 1964 SPRING MEETING, Gatlinburg, May 4-5; Gerald G. Somers, ed., 90 pp.

Special government dispute settlement panels—four views; retraining in the South; unionization in the South; the impact of race relations on industrial relations in the South; labor relations in government services.

PROCEEDINGS OF THE SEVENTEENTH ANNUAL MEETING, Chicago, December 28-29, 1964; Gerald G. Somers, ed., 324 pp., \$4.00.

A current focus for industrial relations research; industrial relations in 1975—social security, trade unions, collective bargaining, manpower policies; industrial relations policies of American corporations abroad; evaluation of national manpower policies; manpower and welfare programs: benefit-cost analysis; labor participation in management.

HOURS OF WORK (Volume XIV), 1965; Clyde E. Dankert, Floyd C. Mann, Herbert R. Northrup, eds., 208 pp., \$3.50, Harper & Row.

The reduction in hours; the influence of collective bargaining on hours; the influence of legislation on hours; hours of work in Canada; hours of work and moonlighting; economics of overtime; shift work and the shorter work-week; automation, rationalization, and urbanization: hours of work in the office; hours and output; automation, unemployment, and shorter hours; hours of work and the general welfare.

PROCEEDINGS OF THE 1965 SPRING MEETING, Buffalo, May 3-4; Gerald G. Somers, ed., 63 pp.

Equal employment opportunities: problems and prospects; reducing unemployment: problems and policies; organized labor and political activity; the behavioral sciences and collective bargaining.

PROCEEDINGS OF THE EIGHTEENTH ANNUAL WINTER MEETING, New York, December 28-29, 1965; Gerald G. Somers, ed., \$4.00.

Manpower needs and educational policy; U.S. manpower future; manpower policies and programs; current status of management research; the union as an organization; adjustments to technological change; concept analysis in industrial relations; unemployment in a changing labor market; information, mobility and adjustments in a changing labor market; union and management interests in the investment of pension funds; labor history.

**1965
IRRA
Eighteenth
Annual
Winter
Proceedings
New York**

**Manpower
Projections**

**Manpower
Policies**

**Management
Research**

**Union as an
Organization**

**Educational
Policy**

**Technological
Change**

**Job
Consciousness**

Bargaining

Seniority

Unemployment

**Internal
Training**

**Engineer-
Scientist
Mobility**

**Labor Market
Information**

Pension Funds

Labor History

**Index
1961-1965**