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A study of inter-department mobility of workers in a meat packing plant: Volitional versus non-volitional

John A. Ballweg

University of Nebraska at Omaha

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A STUDY OF INTER-DEPARTMENT MOBILITY
OF WORKERS IN A MEAT PACKING PLANT:
VOLITIONAL VERSUS NON-VOLITIONAL

by
John A. Ballweg

A Thesis
Presented to
the Graduate Faculty of the Department of Sociology
University of Omaha

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

JUNE 1962
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CHAPTER I

INTRODUCTION

Sociological literature is replete with studies related to the general area of occupational mobility. Most of these studies are concerned primarily with either career mobility or inter-generational mobility. In this study the concern is directed toward what appears to be two conceptually unique and empirically discernible types of mobility. It is hoped that the findings will contribute to the growing knowledge in the area.

I. STATEMENT OF THE PROBLEM

The evolution of American industry from small independent productive enterprises to large corporate factory systems has precipitated a change in the relationship existing between employer and employees. The intimate personal relationships, characteristic of the small business venture, manifested itself in paternalistic behavioral patterns, as contrasted with impersonal contractual relationships which typify the basic behavioral motif of a vast majority of contemporary industrial firms.

In discussing the changes which have occurred because of the evolution from small independent businesses to
large corporate structures, Caplow stated, "The most important of these processes have to do with the increasing size of social groups, the progressive diversification of their functions, and the increasing control which they exert over behavior."

When plants were small, the worker was considered able to individually demonstrate his abilities and achievements to the owner. In contrast, the authority in mass production industries is not vested in a person, but in bureaucratic offices, having positions hierarchically arranged with respect to function, authority and control. The supervision over workers is generally exercised in an indirect manner by bureaucratic offices in a chain of command. The interaction which transpires between the workers and managerial personnel is usually limited to the immediate department supervisors.

One of the many ramifications of this transformation has been that the intra-plant mobility pattern of workers has been greatly modified. Most productive plants no longer were found to operate as a single integrated unit.

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Instead, generally, an individual plant consists of a number of different divisions or departments, each of which have been assigned a specific function in the overall productive operation. Workers in one department operate in comparative isolation from other plant operations. As such, the mobility within the plant consists primarily of job changes within the department to which the worker is assigned, or in transfer from one department to another by the management of the plant.

The lack of opportunities for job selection by workers often presented problems of employment instability. If workers within a mass production industry were controlled by predominantly external forces, the only course of action, in the event of job dissatisfaction was to sever employment and seek a job in another plant or industry.

The growth of unionism in this country has been partly responsible for providing workers with greater personal autonomy and control over their job career patterns. In many of the mass production industries, the union contract stipulates that the worker may, through utilizing his own initiative, realize inter-department mobility.

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4Reynolds, op. cit., pp. 35-51.
5Ibid, pp. 48-49.
This would, of course, be dependent upon a reciprocal recognition on the part of management that such a transfer would be feasible and warranted.

In general, this study investigates inter-department mobility with respect to a representative group of blue collar workers in a meat packing plant. More specifically, the distinction is being made between what might be called volitional and non-volitional mobility. An effort will be made to ascertain to what degree volitional mobility exists in the plant. In addition, various correlates of respondents will be explored and an attempt will be made to determine the relationship which prevails between the correlates and the source of inter-plant mobility.

II. DEFINITION OF TERMS

Throughout this report, several terms are used which require clarification of meaning.

Volitional mobility. This refers to movement of a worker from one department to another, because of a self-initiated request for transfer.

Non-volitional mobility. This is used to designate the movement of a worker from one department to another which was instigated by management.

Non-mobile. The term used to indicate the absence of any inter-department mobility by the worker.
Meat packing industry. The title designates a major branch of productive activity, including all plants concerned with meat products.

Packing plant. This represents a single set of physical properties in the meat packing industry. A plant could operate as a single unit, or as a branch of a multi-unit company.

Meat packing. The term is used to describe the overall objective of processing meat products.

Position. A term used to describe a group of tasks performed by one person. The number of positions and the number of workers are always identical.

Job. This term is considered to include a number of similar positions in a single plant. The number of workers employed on a job could be one or more.

Occupation. A term used to describe a group of similar jobs found in several establishments.

Mobility pattern. This is used to describe the in-plant career of the worker from the time of his employment.

III. SCOPE AND PURPOSE

It is recognized that the factor of inter-department mobility of blue collar workers does not encompass the full dimension of "mobility potential" existing within an
industrial plant. Another facet of mobility is represented by movement to various white collar occupations, including supervision and management. An additional dimension of mobility from blue collar work involves movement to the status of union representative.

However, the greatest number of workers within a plant have the opportunity for movement only within their assigned department, or to other plant departments. Selection of personnel for supervisory positions rests with the discretion of management; the personal wishes of the workers are not considered primary contributing factors. The same holds true with the selection of union officials who have no direct connection with the general mobility pattern of the plant.

The purpose of this investigation can be viewed in terms of four major objectives.

The first purpose was to ascertain if the various departments in the plant were perceived by the workers, to be of equal status, or whether factors inherent in the department made certain departments more desirable than others.

The second purpose was to examine to what degree mobility existed within the plant and whether mobility initiated by workers was a factor in the overall inter-department mobility pattern.
A third purpose was to investigate whether the characteristics of workers who displayed volitional mobility differed from those whose department transfers were management sponsored.

The final purpose was to determine if any differences appeared in the direction of mobility between the volitionally mobile and non-volitionally mobile workers.

IV. SIGNIFICANCE OF THE STUDY

The mobility of workers within an industrial plant has been considered as controlled primarily by the factor of seniority—or period of continued service with the employer. However, a plant in mass production industry is composed of numerous divisions or departments. The blue collar workers, in many of the plants, have at their disposal institutionalized provisions which permit some freedom in choosing the department of the plant in which they will serve.

For blue collar workers employed within a department, the range of occupational choice encompasses the


8Union Contract Clauses, loc. cit.
threee categories of the Edward's scale. A simple distinction of advancement from an unskilled to a semi-skilled job, or from semi-skilled to a skilled job, does not necessarily represent upward mobility. Reynolds has noted, in considering the significance of movement on the occupational ladder,

The classification of a job as 'skilled', 'semi-skilled' or 'unskilled', is not necessarily a good indication of the wage level or attractiveness of the job. Some jobs classified as semi-skilled may be higher paid and more attractive than some of the skilled jobs. The semi-skilled category itself contains a very wide range of jobs, and the workers could progress or regress considerable without moving outside the semi-skilled group. Numerous other factors enter into occupational progress. In a manufacturing plant, transfer from an hourly-rated job to an incentive job is usually considered a promotion, or transfer from the second shift to the first shift.10

It might be added, that movement from a department of lesser desirability, to a department of more desirability could be considered a promotion; movement from a department of more desirability, to a department of lesser desirability, could be considered a demotion.

9Alba E. Edwards, Comparative Occupational Statistics for the United States (Washington: U. S. Government Printing Office, 1943), p. 43. The Edward's scale employed: (1) professional persons, (2) proprietors, manager, and officials, (3) clerks and kindred workers, (4) skilled workers, (5) semi-skilled workers, and (6) unskilled workers. The blue collar workers involved in this study were members of the three lower categories.

This would be true even though the job held in each of the departments might require a comparable degree of skill.

What is really significant in relation to intra-plant mobility of workers is not a management developed hierarchy of jobs and skills, or the difference in functional importance and relative compensation determined by management. The important consideration is what the workers think. Management, as a non-participant in the functional interaction existing between the workers themselves, can evaluate more objectively, but less accurately, the values of the workers. With this consideration in mind, it becomes apparent that the intra-plant mobility of workers is difficult to measure, if a set of standards prepared and developed by non-participants are employed.

V. ORDER OF PRESENTATION

Following the introductory chapter, this research has been divided into six chapters.

Chapter II consists of a selected review of the literature in the general area of mobility. Attention is directed toward the different approaches that have been used in the investigation of occupational and job mobility.

Chapter III entitled, Historical Consideration, considers the background and development of the meat
packing industry. Consideration is directed toward three components of the industry: (1) policies related to management, (2) the workers, and (3) the unions.

Chapter IV consists of an examination of the plant under investigation. The composition of the work force as well as factors related to plant departments are considered in this chapter.

Chapter V is designed to outline the methodological procedures followed in the investigation. The method employed for the selection of the two samples used in the investigation is discussed in this chapter.

Chapter VI has as its purpose the discussion findings. The chapter is divided into five sections: (1) characteristics of the sample, (2) the department hierarchy, (3) the sources and directions of mobility, (4) the department function as related to mobility and (5) the seniority factor in mobility.

Chapter VII, the final chapter, is reserved for a summary and interpretation of the research findings. A final subtopic in this chapter considers application of the findings.
CHAPTER II

REVIEW OF THE LITERATURE

Although numerous investigations have been conducted in the general area of mobility, the present study does not compare directly with any previous research. Similarities can be noted regarding certain aspects of methodological procedures and techniques, but the distinction between self initiated volitional mobility and non-volitional, or company sponsored mobility, has made the present investigation unique.

Various studies of mobility have used a number of approaches and methods. Parnes has suggested seven types of mobility which might be examined: (1) inter-firm movement, (2) occupational movement, (3) industrial movement, (4) geographic movement, (5) movement from unemployed status, (6) movement from employed to unemployed status, and (7) movement in or out of the labor force. A slightly different approach was utilized by Palmer who considered mobility in terms of changes in (1) jobs, (2) occupations, (3) industry, (4) locality, and (5) status.

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The findings of the various investigations have been found to differ significantly in rate and character depending upon the approach used. The research which was found to be most closely related to the present investigation dealt with three areas of consideration:

1) Inter-generational mobility which is designed to examine the occupational differences of a generation of workers as compared with parental occupational patterns.

2) Inter-occupational mobility, in which the focus of attention is directed toward career patterns of individuals who change from one occupational category to another; this classification has been further subdivided into intra-occupational mobility within occupational classifications.

3) Intra-plant mobility which involves a change of jobs or occupational classifications, within a single productive unit of industry. The most distinguishing characteristic of intra-plant mobility is the continued service of the worker with a single organization.

Most of the research in the literature does not reflect a definite line of demarcation between each of the three suggested types. In this review the central theme of the research was used as a means of the three types.

13 Ibid.
I. INTER-GENERATIONAL MOBILITY

Through the use of 1930 and 1950 census data, Jaffe and Carleton made a comparison of the occupational distribution of men, by various age categories. Their findings indicated that, during the period under study, the volume of upward mobility was greater than the volume of downward mobility.

An additional finding was that a great deal of horizontal and vertical mobility had occurred during the period. During the entire work career, only 20 per cent of the work force remained in the same vocational group. The first two or three decades of the work career were found to represent a period when the greatest vertical mobility occurred. The highest position of the occupational ladder was reached at approximately fifty years of age. The authors concluded, the nearer the bottom of the occupational ladder the worker begins his career, the greater the tendency for his mobility pattern to remain relatively stationary. In contrast, those who start near the middle move higher in their upward climb,

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15 Ibid., p. 51.
and those who start high have a tendency to remain in the upper levels.

The consideration of age as a factor in inter-generational mobility was used in a study by Davidson and Anderson at San Jose, California. The findings indicated that age was an important factor in job change. Horizontal movement of workers between the ages of twenty and thirty-four was represented by an average of three jobs which were held eight months or longer; workers over thirty-five years of age had held a total of four jobs during their entire work careers. Younger workers appeared to experience a period of trial and error while selecting an occupational career. Although mobility was generally upward in both age groups, the proportion was not significant.

In another study of inter-generational mobility, Rogoff observed the movement of employed persons from one occupational class to another between 1910 and 1940. The three broad occupational classes used in this study were white collar, blue collar, and farming.


17Ibid., p. 84.

18Natalie Rogoff, Recent Trends in Occupational Mobility (Glencoe, Ill.: The Free Press, 1953).
It was determined that white collar occupations receive their participants more frequently from families of white collar class origin than would be expected in a random sample with no sampling involved. At the same time, workers from blue collar origins were engaged in white collar work about two-thirds as frequently as would be expected by chance.

The major conclusion reached by Rogoff was no significant change in the inter-generational mobility pattern between white collar and blue collar workers had occurred over a year period. However, it did appear that a major barrier existed between "head" and "hand" occupations as respectively typified by white collar and blue collar work.

II. INTER-OCCUPATIONAL MOBILITY

A further demonstration of the limitations for mobility involving the "head" and "hand" occupations was found in an Oakland, California study by Lipset and Bendix. Using a sample composed of 935 working heads of families, it was found that over a twenty-five year period the workers held 4.8 jobs. Shifting of jobs occurred most

frequently in professional, semi-professional and white collar workers. The shifts were found to be primarily intra-occupational. When inter-occupational mobility did occur it was generally to an adjacent occupational group.

While the study found that 62 per cent of the non-manual workers had spent some time in manual work, and 47 per cent of the manual workers had been employed at non-manual work, the figures did no appear as significant when the time element was examined. Only 20 per cent of the careers of white collar workers was spent performing manual work; blue collar workers had crossed the separation between "head" and "hand" occupations for only 11 percent of their work careers.

The conclusion of the Lipset and Bendix research was that once a worker had embarked on a career of either blue collar or white collar work, the chances of his changing to another career was relatively slight.

An additional adaptation of the time element in regard to work careers was used by Form and Miller in an Ohio research project involving 276 employed men and

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women. The work careers of the workers were divided into three periods: (1) initial, (2) trial, and (3) stable. The division in some ways explained the presence, for short periods of time, of blue collar workers in the white collar field, and white collar workers performing manual tasks. During the "initial" and "trial" periods the worker was attempting to establish a permanent career. The time element in the two earlier phases of the work career was considerably shorter than the "stable" work period.

As in other research, the general theme of limited crossings of the "head" and "hand" occupational classifications were found. Most skilled workers started their careers as unskilled or semi-skilled workers, but after attaining skilled status, little movement was made to other occupations.

The general theme of vertical occupational mobility in industrial bureaucracies was described in the following quotation from the Lynds,

The ladder has lost some of its rungs, with the disappearance of apprenticeship and the large measure of the blurring of the distinction between skilled and unskilled labor.

The step up to the first rung where the foreman stands appears to be getting higher and therefore harder for the mass on the floor to make. Above the foreman's rung the whole aspect of the ladder has changed in three notable respects since the World War. It is more difficult for the enterprising mechanic to find an alternative way up the ladder by launching out with a plant of his own in competition with the existing productive structure of large-unit plants.
Above the foreman's rung the ladder is ceasing to be one ladder: there have virtually ceased to be rungs between the foreman and higher section of the ladder beyond his reach where an entirely new set of personnel usually not recruited from working-class personnel begins.

And, finally, the ladder has lengthened with the relative increase of "absentee ownership" of local plants as units of national corporations, and payrolls of these national corporations.21

A slightly different consideration of vertical mobility, presenting education as an important criterion, was stated by Barber,

From the viewpoint of social mobility, a work organization in modern society is not usually an unbroken ladder up which an individual may climb the whole way. More typically it consists of a series of ladders each covering only part of the hierarchical range of the total organizational structure. We may think of the lower unskilled, or semi-skilled jobs in hierarchically structured work organizations such as factories, Army, government civil service, or large department stores as making up one such ladder. Those set their foot upon this ladder, usually from the lower or lower-middle class family and without higher education, can climb only a limited distance to the top. Typically, people with higher education start on the ladder... and sometimes move upward and onto the highest reaches of the hierarchical structure.22

The research thus far reported has indicated that the opportunities for blue collar workers to move to white collar occupations has been quite limited. However,


blue collar workers do display extensive patterns of mobility. A study of mobility conducted by Palmer investigated, in addition to other factors, the reasons skilled workers voluntarily changed from one employer to another. The 725 respondents, who had voluntarily initiated job shifts between 1940 and 1950, were divided into four categories as to reasons for their separation: (1) job improvement, including reasons involving wages or other means of improving economic position, working conditions, hours etc.; (2) relationships on the job, including unfavorable attitudes toward the management or supervision; (3) personal or family situations; and (4) defense jobs.

It was found that 55 per cent of the workers indicated "job improvements" as the reason for voluntarily changing employers. Another 10 per cent gave "relationships on the job" as the cause for the change. These two factors, directly related with work in the plant, accounted for two-thirds of the employer shifts. From this data the conclusion was made that workers attempt to improve their job position even when a change in occupational category is not involved. The inability of the worker to execute satisfactory job adjustment within the plant—

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becomes the single most important factor for terminating employment and seeking a job in another plant.

These findings of Palmer confirmed an earlier survey conducted in 1947 by Reynolds and Shuster. The Reynolds and Shuster research, involving interviews with workers, indicated that the five main factors in changing jobs were: (1) unfavorable physical characteristics of the job, (2) wage inadequacies, (3) unfair personal treatment, (4) lack of independence on the job, and (5) uninteresting nature of the work. While admitting that the desire for advancement was not the single cause of labor turnover, Reynolds and Shuster concluded, "There remains, however, a considerable number of workers who do desire advancement and are unable to obtain it because of the limited promotional possibilities, in many industrial plants."

III. INTRA-PLANT MOBILITY

The present study has focused upon inter-generational and inter-occupational mobility as a method of examining the overall mobility patterns of workers. For purposes of this study, a closer relationship was found in research concerned with a single plant.

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Inter-generational studies have shown that workers are inclined to move from one employment situation to another, with limited opportunities for movement between the occupational categories. In contrast, mobility existing within the single plant has as its purpose the examination of movement which occurred when a change of employer was not involved.

Walker has suggested that industry often considered a job simply as a job, without proper consideration of the individual occupying the position. Some workers are favorable toward, and actually prefer, jobs consisting of repetitive operations. In contrast, other workers resent this type of work. Fitting the wrong worker to the job was considered a source of unrest and low morale in the plant. Walker recommended better job placement, with an effort made by the employer to determine a satisfactory work situation as reflected by the interests of the worker.

In a steel plant, where seniority was department-wide, Walker interviewed sixty-two workers concerning their desires

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for promotion. Responses are as indicated in Table I., page 23.

The conclusion of Walker's study was that the desirability of the job, from the standpoint of the individual worker, was more important than the idea of promotion.

The limited opportunities for promotion within a plant was reflected in a study of 202 automobile workers by Guest. The majority of the workers had experienced little or no changes in wages or job status after 12 to 15 years of service in the plant. The opportunities for promotion to supervision was severely limited by the number of jobs available. During the year of the study, only one foreman's job became available for each 120 workers. The conditions of employment appeared to cause low mobility, since four out of five workers interviewed expressed a desire for a change in jobs within the plant.

Similar situations were found in a more extensive study of automobile workers by Chinoy who stated,

"Such goals as nonskilled workers did pursue in the factory tended to follow an informal hierarchy of desirability instead of the formal structure of advancement. Workers ranked the various kinds of nonskilled jobs in an order of preference which roughly followed divisional and department lines


**TABLE I**

NUMBER OF MEN IN HOT MILLS DESIRING AND NOT DESIRING ADVANCEMENT *

<table>
<thead>
<tr>
<th>Worker's desires</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number who want to be advanced and expect to be soon</td>
<td></td>
</tr>
<tr>
<td>Number who want to be advanced, but say they cannot be, at least for the present</td>
<td>11</td>
</tr>
<tr>
<td>Number of men who said they could be advanced but refused</td>
<td>14</td>
</tr>
<tr>
<td>Number of men who said they did not want advancement if offered</td>
<td>23</td>
</tr>
<tr>
<td>Number of men who wanted advancement but were not sure whether or not they would</td>
<td></td>
</tr>
<tr>
<td>Number of men who wanted to learn all other jobs whether or not each one meant immediate advancement</td>
<td>2</td>
</tr>
<tr>
<td>Number of no comments</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
</tr>
</tbody>
</table>

*Walker, Steeltown, op. cit., p. 91.*
But which largely ignored the possibilities of promotion to better paying jobs within divisions and departments. 30

The goals of the workers interviewed by Chinoy were found to be directed more toward objects and interests outside the factory. Status symbols, such as a house or car, were substituted for occupational goals in the factory. At the same time the workers entertained a latent goal of leaving the factory to establish a business of their own.

When aspirations of the workers were directed toward opportunities in the factory, the factor of seniority was considered as the primary obstacle effecting job change. The workers knew that if they spent enough time at one job and accumulated sufficient seniority, they could move to another job which appeared more desirable. In most cases movement was considered to depend upon the ability of the worker to accumulate seniority, or to utilize the transfer machinery created by the union contract.

The pattern of advancement of workers from assembly line and machine jobs to off-production and miscellaneous production work is indicated in Table II, page 26. Of the workers who began as machine operators, eleven secured more desirable jobs in off-production and miscellaneous production work.

30 Ibid., p. 65.
31 Ibid., p. 77.
production jobs. The same was found true of six workers who started on the production line. Five workers followed a pattern of movement from the production line to machine operation and then to off-production or miscellaneous production jobs. The remaining six workers interviewed started in jobs considered more desirable.

Chinoy gave no indication as to the mobility source in relation to the mobility displayed in Table II, page 26. The workers could have been mobile either volitionally, by using transfer provisions in the union contract, or non-volitionally, by virtue of transfers sponsored by management.

The link existing between the Chinoy investigation and the present study, with the distinction of adding source of mobility as a consideration, constitutes a major point of departure for the present investigation.

In addition to the mobility studies of single industrial plants, several investigations have been conducted in meat packing plants. As in the several studies of other industrial plants, the focal point of these investigations has not been mobility. However, mobility was given consideration in each of the texts.
TABLE II

JOB MOBILITY IN THE A.B.C. PLANT OF OFF-PRODUCTION
AND MISCELLANEOUS PRODUCTION WORKERS

<table>
<thead>
<tr>
<th>Pattern of mobility</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line to off-production job</td>
<td>6</td>
</tr>
<tr>
<td>Line to miscellaneous production job</td>
<td>5</td>
</tr>
<tr>
<td>Machine to off-production job</td>
<td>4</td>
</tr>
<tr>
<td>Machine to miscellaneous production job</td>
<td>2</td>
</tr>
<tr>
<td>Line to machine to off-production job</td>
<td>3</td>
</tr>
<tr>
<td>Line to machine to miscellaneous production job</td>
<td>2</td>
</tr>
<tr>
<td>Started on off-production job</td>
<td>5</td>
</tr>
<tr>
<td>Started on miscellaneous production job</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
</tr>
</tbody>
</table>

*Chinoy, op. cit., p. 76.*
Blum's study of the Hormel Packing Company indicated a worker's desire for a more skilled job was related to a desire for more prestige and/or more money. Skilled work always carried more prestige and, in the majority of cases, more pay. The exception was skilled jobs in the machine shop for which the pay was less than production jobs. The interviews with workers in the machine shop indicated that a more satisfactory work environment and satisfaction with a skilled job compensated for the lower pay.

The extent of job mobility in a meat packing plant, during the year 1949, was incorporated in research on minority groups by Hope. It was found that in meat packing plants located in Omaha, Nebraska, a total of 29.6 per cent of all Negro workers and 22.8 per cent of all white workers were promoted at least once. Of those workers promoted more than one time, 6.2 per cent were white and 10.6 per cent Negro.

The majority of union officials representing packing house workers felt that there was no racial discrimination in upgrading of workers. The minority, who indicated

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33 Ibid., pp. 88-89.
discrimination did occur, felt that the method used to limit opportunity was the promotion of Negroes to semi-skilled jobs in less desirable departments, and restricted entrance of racial groups into highly skilled jobs and departments.

The distribution of workers according to skill indicated that the per cent of white workers in unskilled and semi-skilled jobs was greater than that of Negroes. The percentage of workers, whose usual occupational classification was skilled work, was found to be 36 per cent Negro workers and 20 per cent white.

The factor of seniority and how the promotions to skilled categories were made was not considered in this data.

The opportunities for inter-department mobility of workers was noted in research by Purcell. Workers were permitted to make application for transfer from the department to which they were assigned to other departments in the plant. To what extent the right to initiate transfer was utilized by the workers was not examined in the research. In addition, no attempt was made to determine whether awareness existed on the part of the workers as to the transfer

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36 Ibid., p. 33
provision.

In another study, interviews were conducted by Purcell with workers at three packing plants of Swift and Company located at Chicago and East St. Louis, Illinois and Kansas City, Missouri. Part of the interview consisted of questions on the attitudes of the workers pertaining to the chances of getting a head with Swift. The findings indicated that there were differences in attitudes, depending upon the city, as well as differences by age, sex and race.

Among workers in East St. Louis, 56 per cent were favorable in their attitude toward advancement opportunities, while the Chicago and Kansas City percentages were 43 and 44 respectively. Long-service white workers in East St. Louis were the most favorable of any subgroup with 86 per cent expressing the opinion that advancement opportunities were satisfactory. This percentage was considerably higher than the long service workers at either of the other plants. At all plants, the long-service workers also mentioned more often the need for adequate education as a requirement for advancement.


39 Ibid., p. 120.
The women interviewed were not of sufficient number to make valid comparisons. It was felt that women packinghouse workers were not as concerned about advancement opportunities as were the men.

Less than one-half the Negro workers in Chicago and East St. Louis held favorable attitudes toward opportunities for advancement, while in Kansas City, the percentage was less than one-quarter. In all categories Negro workers rated advancement opportunities lower than white workers. The majority of Negroes were found to be employed in semi-skilled jobs, as was the case with white workers. Some Negroes had risen to good pay and status as skilled butchers in each of the three plants.

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40 Ibid

41 Ibid., p. 128.
CHAPTER III

HISTORICAL CONSIDERATIONS

The purpose of this chapter is to briefly discuss several historical aspects of the meat packing industry. The chapter is divided into three sections. In the first section consideration is directed toward structure and development of the industry as related to management policies. A second section, dealing with the workers, considers composition of the work force, working conditions, and security. The third section has as its purpose a discussion of the historical development of unions in the packing industry.

I. THE INDUSTRY

Although individual plants within the packing industry differ in size and scope, a threefold operating procedure is generally followed: (1) the purchase and slaughter of three types of food bearing animals -- beef, hogs, and sheep; (2) processing the meat and by-products; and, (3) the sale and distribution of the finished products.

The operating policies of the industry date back to the latter part of the nineteenth century. Prior to the utilization of mass production techniques in the industry, the processing of meat was conducted in two ways. A
"slaughterhouse" was located in or near an urban area. The "slaughterhouse" consisted of a relatively small productive unit designed to supply the needs of the local community. Fresh meat was processed and delivered to customers by the owner. In many cases, labor in this type of operation was limited to the owner and his family.

The second type of operation was the "packing house" located in an area where abundant supplies of livestock were available. The "packing house" cured and packed meat in barrels for shipment to areas where products were required. It is from this procedure of packing cured meat in barrels that the meat packing industry gets its name.

The development of refrigeration and the refrigerated railroad car in the 1870's resulted in many changes in the industry. The seasonal aspects of meat packing was somewhat eliminated with the ability to process fresh meat under refrigeration. In addition, meat products could be shipped from one area in the country to another with less danger of spoilage.

As refrigeration and refrigerated railway service became available, the meat packing industry expanded geographically to areas where livestock could be raised more economically and profitably. Physical plant facilities
were made larger and more diversified in operations. It was no longer necessary to limit packing operations to cured meats when shipment was required. Mass production techniques utilized in other industries, including job specialization and division of skills, were incorporated into operating procedures of the packing industry. Each worker was assigned a specific task in the slaughter or processing of products.

Enlarged plant facilities and expanded operations required additions to the work force. Since the skills required for the varied operations were not equal, a policy for securing workers to fill the more skilled jobs was needed. This required either training and promoting existing personnel, or hiring new employees with the required skills. The founder of Swift and Company, G. F. Swift, was quoted as saying, "I can raise better men than I can hire". This policy of advancing men from the ranks was generally accepted as industry standard. In considering personnel advancement in a meat packing plant, Carver concluded that,

"a great majority of new employees are young men with very limited experience who start at the bottom of the ladder and work their way to the

top with the rapidity that depends largely upon their energy and ability."  

Records are not available to determine to what extent this promotion policy was followed.

II. THE WORKERS

Expansion of the meat industry took place during the same period in history as immigrants were arriving in great numbers from Europe. Irish immigrants were among the first to fill the labor needs during the 1870's. Following the Irish were Germans and later, Polish, Lithuanians, Bohemians and other European immigrants. Until the twentieth century the majority of workers in the meat industry were foreign born. These immigrants lived in communities surrounding the packing district, and in many ways retained the values and attitudes of their native cultures.

Negro workers were not employed in great numbers until the beginning of the twentieth century. A strike in 1904 brought a major influx of southern Negro workers into the industry. The number of Negroes has increased until they now constitute one-third of the total work force.

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force in meat packing plants.

The conditions under which employees worked at the beginning of the twentieth century was the subject of a novel by Sinclair. Conditions were described as both unhealthy and unsanitary. As a result, a number of investigations were launched to determine what steps were needed to improve conditions. A committee appointed by President Theodore Roosevelt reported a disproportionate number of respiratory diseases were found among workers. The diseases were attributed to requiring work operations to be conducted in low temperatures with poor ventilation. General working conditions and health standards were found to be low. Legislation was enacted by the federal government requiring inspection of sanitation when meat products processed were to enter interstate commerce. However, the workers continued to function under refrigerated temperatures, more conducive to the product than to personal comfort.

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48 Ibid.
Labor turnover in the meat packing plant has been among the highest in American industry. Over one-half the workers who terminated services did so voluntarily. In one month, during the year 1947, over 10 per cent of the labor force changed employment. This represented twice the labor turnover in all manufacturing industries.

A factor considered as causing turnover in the packing industry has been the lack of job security. Supplies of livestock for processing have been seasonal, causing an inconsistent need for labor. The result was that workers were subject to frequent lay-offs during the periods of low production.

Although somewhat lacking in security the weekly earnings of meat packing workers has been higher than those of any other segment of the food industry. Higher wages, coupled with unemployment insurance in the event of a layoff,


50Corey, op. cit., p. 261


53Corey, op. cit., p. 261.

has substantially increased the annual income of workers. Production workers total nearly 80 per cent of the nearly one-third million employees in the packing industry and receive 73 per cent of the billion and one-quarter payroll.

III. THE UNIONS

The first major union activity in the meat packing industry was begun in 1897. A trade union, chartered by the American Federation of Labor, was called the Amalgamated Meat Cutters and Butcher Workmen of America. The union solicited membership and attempted several strikes. Nearly forty years elapsed before full recognition was gained.

A union chartered by the C I O, the United Packinghouse Workers of America, began organizing locals about 1940. Although several independent unions were formed in the industry, the majority of workers have been represented by either the Amalgamated or the U P W A.

Packing house unions were designed to represent the workers in collective bargaining with management; wages and working conditions were matters of primary concern. The union was also designed to prevent discrimination and

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55Ibid., p. 782.
unfair treatment of workers. Contracts include provisions regarding seniority, transfers, promotions and layoffs.

The contract clause providing for voluntary transfer within the plant from one department to another was not codified until unions were recognized as representing the workers.

56 Purcell, *The Worker Speaks His Mind*, op. cit., p. 306.
CHAPTER IV

THE OMAHA PLANT: ITS STRUCTURE AND FUNCTION

This chapter has as its purpose a discussion of the structure and function of the meat packing plant used in this study of mobility. The first subdivision of the chapter directs attention to the size and location of the plant. This is followed by discussion of plant personnel, jobs, pay rates, departments, promotions and transfers.

The plant

Major Meat Packing Company, the plant in which this research was conducted, operated as a branch of a national packing concern with head quarters in Chicago, Illinois. The plant was established in 1886, and has continued to operate at the same location since that time. The plant has ranked as one of the five largest productive operations of the parent company. Of the nineteen meat packing plants located in Omaha, Major Meat Packing Company ranks second in both personnel, employed and amount of products.

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57 The name "Major Meat Packing Company" has been substituted for the actual name of the plant in which the research was conducted. Whenever the name "Major Meat Packing Company" appears in the following sections of this text, it should be interpreted as indicating the plant described in this chapter.

produced.

The plant is located about four miles from the central business district of the city, in an area known as South Omaha. Adjacent to the plant are the Union Stock Yards, which supply a major portion of livestock processed at the plant. Residences surrounding the meat packing district have historically housed workers of the numerous plants and related industries located in the area.

**Personnel**

The personnel employed at the plant included executives, supervisors, clerks, office personnel, and technical personnel as well as plant workers.

Although mobility research was concerned only with the blue collar plant workers, a brief examination was made of the differences existing between the various categories of workers involved in the operation of the plant. These classes of employees as shown in Table III, were represented by: (1) general office personnel, (2) salaried employees, and (3) blue collar workers.

General office employees consisted of commercial department executives and department personnel, administrative groups, office workers, and sales personnel. This group, composed of 233 members, represented 12 per cent of the total plant employees. Nearly 25 per cent of the general office personnel were women, the highest percentage
of the three classes, Table III. The majority of general office employees worked on two floors in the office building; these employees were separated from the productive operations of the plant.

TABLE III

TOTAL EMPLOYEES OF MAJOR MEAT PACKING COMPANY
BY SEX AND EMPLOYMENT CLASSIFICATION

<table>
<thead>
<tr>
<th>Sex</th>
<th>General Office Employees</th>
<th>Salaried Employees</th>
<th>Blue Collar Workers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>177</td>
<td>154</td>
<td>1,429</td>
<td>1,760</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>12</td>
<td>168</td>
<td>236</td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
<td>166</td>
<td>1,597</td>
<td>1,996</td>
</tr>
</tbody>
</table>

The salaried employees were composed of supervisors, foremen, assistant foremen, department clerks, and technical engineers. Salaried employees were predominantly male; the greatest number were foremen. This group, constituting 8 per cent of the total employees, was distinguished from the general office in that its function included direct contact with productive departments. The offices for the supervisors and technical engineers were not located with general office personnel, but on another floor in the building. Foremen and clerks were found in their respective departments throughout the plant.
The third classification of employees, blue collar workers, consisted of skilled, semi-skilled, and unskilled workers in the various production, service and mechanical departments throughout the plant. Blue collar workers represented nearly 80 per cent of the plant's workforce.

The company had taken certain steps to reinforce the division of employees into the three classes. The most general distinction consisted of considering general office and salaried employees as "management," while blue collar workers were classified as "union." The contract, which existed between the company and the union, designated which employees were eligible for union membership:

All hourly paid production, maintenance, plant clerks, scalers, and cafeteria employees, weekly paid dock checkers, and city and rural truck driver, but excluding the general office personnel, the superintendent, division superintendents, foremen, assistant foremen, working foremen, chief engineers, production incentive department employees, the plant protection force, salaried plant clerks and scalers, laboratory workers, timekeepers, employment employees, salesmen, bricklayers, the employees of the company working in its wholesale market and all engineers, oilers, temperature men and utility maintenance men employed in the boiler and engine room departments.\(^{59}\)

Although several blue collar jobs were classified as part of "Management," the number of employees in these classification was extremely limited.

An additional measure taken to insure differentiation between the two upper classes and blue collar workers was the method of payment for services. General office employees and salaried supervisors received a weekly salary while blue collar workers were paid on an hourly rate. Blue collar workers received pay raises by virtue of a changed job status, or as the result of collective bargaining negotiations. Salary workers received salary increases on the basis of individual merit.

Cafeteria facilities were also provided, using class distinctions. Blue collar workers were served at one cafeteria; separate facilities were provided for the general office and salaried employees. The cafeterias were located on adjacent floors. Entrance to the office cafeteria was not accessible from the plant.

The locker rooms and wash rooms at the plant were also separated by class. Separate facilities were provided for each of the three classes. The majority of lockers for blue collar workers were mesh cages, whereas salaried employees had steel lockers.

An exception was dock checkers and truck drivers who were paid a weekly salary. Other benefits were provided in the same manner as other union workers. The stipulation regarding the payment of overtime to truck drivers (Master Agreement, p. 11), was superseded by local collective bargaining provisions.
No racial distinction was made pertaining to the use of company provided facilities. However, only one salaried employee was a Negro and none was employed in the general office.

As has been indicated by the description of plant facilities, general office employees and salaried supervisors represented a relatively close class association; blue collar workers were a totally separate group.

Other aspects of plant operations considered in this chapter have been restricted to workers in the blue collar labor force. The distinctions presented, regarding classes of employees, were designed specifically to distinguish blue collar workers from other plant personnel.

Jobs

The range of jobs which were available to blue collar workers was evident by 344 job titles, representing a great diversity of work in which the workers could be employed. These were composed of 36 skilled, 269 semi-skilled and 1,039 unskilled jobs. Added to this total were a number of skilled service occupations, such as electrician and steamfitters, which were not considered a

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part of the packing industry for classification purposes. Excluded from the total were a number of jobs, either rendered obsolete by modern automated devices, or by operations not in existence at the plant. No record was maintained of the exact number of different work functions being performed at a given time. However, the company did account for the different skill levels, as is presented in Table IV.

**TABLE IV**

**BLUE COLLAR WORKERS BY SEX AND OCCUPATIONAL CATEGORY**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Unskilled</th>
<th>Semi-skilled</th>
<th>Skilled</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>230</td>
<td>912</td>
<td>287</td>
<td>1,429</td>
</tr>
<tr>
<td>Female</td>
<td>51</td>
<td>117</td>
<td>0</td>
<td>168</td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>1,029</td>
<td>287</td>
<td>1,597</td>
</tr>
</tbody>
</table>

Nearly two-thirds of the blue collar workers were semi-skilled laborers. The distribution of unskilled and skilled workers was relatively equal, with 18 per cent in each of the categories.

The degree of skill required in the majority of cases was determined by the "use of a knife." Precise butchering operations required a greater degree of skill than less exacting steps. In some cases semi-skilled jobs involved the use of a knife, but more often the equipment employed
a power saw or an instrument which was blunter than a knife. The primary function of the unskilled jobs was the preparation of cleanup operations for the more skilled operators.

Pay Rates

The division of skills was reinforced by the pay scale which was offered for the performance of various jobs. Workers performing unskilled jobs were paid one of three rates, depending upon the individual job classification within the unskilled category; five different rates were found in the semi-skilled jobs. Skilled workers received the highest rate of pay for the various tasks performed in the sixteen classifications of skilled jobs. A difference of four cents an hour existed between each of the wage rates. The lowest paid unskilled worker received $2.23 per hour in contrast to $3.15, the rate which was paid for the performance of the highest skilled jobs. Additional compensation was awarded workers for overtime and night work.

A worker could also earn "incentive pay", which was based upon a Standard System, by over-producing a

63Ibid., p. 30.
64For a more detailed description of the Standards System, see Purcell, Blue Collar Man, pp. 137-152.
specified number of work units per hour. The Standards System was relative to the department and the job. In some departments the total production of the "gang" was used as a basis, whereas in other departments a smaller work unit or individual production rate, was utilized as a basis for determining payment.

**Departments**

Blue collar workers were assigned to one of the fifty-five different departments within the plant. Categorized as to functions, the departments were of three different types: (1) productive departments, which deal directly with the processing and preparation of products; (2) service departments, which provided facilities and service to the productive departments or to personnel; and (3) mechanical departments, which were concerned with the maintenance of plant facilities and equipment.

The three categories of departments, and their respective individual departments which composed all of them were: (1) Production departments—Pork Dress, Pork Warm Variety Meats, Pork Cooler, Variety Meat Cooler, Pork Cutting, Pork Trim, Pork Pack, Rendering, Sweet Pickle,
Dry Salt, Smokehouse, Sliced Bacon, Cattle Dress, Beef Warm Variety Meats, Lamb Dress, Hide Curing, Oil House, Casings, Beef Load, Lamb Load, Beef Cut, Special Cutting Room, Freezer, Lard Refinery, Table Ready Meats, Canned Meat, Feed, Glue Manufacturing, Frozen Foods and Reformulation.

(2) Service departments--Trim Load, Car Icing, Storeroom, Box Factory, Supply Gang, Yard Cleaning, Janitors, Laundry, Tractors, Automobiles, City Fat, Feed Lots and Cafeteria.


The workers in one department operated in comparative isolation from workers in other departments. The plant was multi-storied, with as many as nine floors in which the various departments performed their functions. Products were lowered from one floor to another, either by elevator or gravity tubes. In this way, it was possible for a worker, performing one task, to have little or no contact with the worker who completes the next phase in the processing operation. In order to maintain the proper temperature which was conducive to the operation being performed, those departments which were located on the same floor, were separated by heavy insulated floors.
The number, type, and skill of the jobs differed with the departments. The larger departments employed as many as one hundred workers, while smaller departments had less than a dozen. The production departments were characterized by assembly line operations; each worker performed a specific task as the product reached his station. Service and mechanical departments offered more freedom of operation and, in most cases, less individual supervision. The division of skills ranged from entirely unskilled work in one department to all skilled workers in another. Most of the departments contained some workers of each skill level, with a heavier concentration of semi-skilled workers. An example was the Beef Dress department which was responsible for the receiving of live beef, slaughtering and dressing the animals, and sending the dressed carcass to the beef coolers. The Beef Dress department, one of the largest departments in the plant, consisted of seventy-four different jobs. These jobs were divided among the skill levels as follows:

(1) Skilled:
- sticking
- heading
- flooring
- cutting feet
- rumping
- cutting out and removing viscera
- backing
splitting
dropping hides
splitting chucks
separating carcass of cattle
special injection operation

(2) Semi-skilled:
driving and penning
shackling
stunning cattle
skinning and cutting off front foot
cleaning weasand from windpipe
skinning hind leg
opening aitch bone
sawing breast bone
raising gullet and tying weasand
breaking and cutting off hind leg
cutting out bladder
sawing tail and vertebrae
poke heal cord and marking crotch
trimming bruises
trimming skirts and saving sweetbreads
scribe sawing back bone
cutting out glands
trimming government retained carcasses
sawing breast using power saw
sawing chucks
Restraining injection cattle

(3) Unskilled:
dropping cattle on floor
hoisting and hanging off
pitching up
returning shackles
cut cord from the shanks
pulling to half-hoist
dropping bungs
pulling tails
pulling fels
ripping tail
hanging off
clearing out
washing and piling trolleys
hanging up trolleys
squeegee floor
janitor
picking up feet, legs and condemned product
cutting off heads and trucking
switching sides to conveyor
cleaning pens
manual transporting product
cleaning and oiling rails
removing and placing sawdust on floors
wiping trolleys and placing into magazine
switching
trimming rounds and cutting off tails
making brine
washing inside of round
pumping kidneys
beating back bones
trucking cloths and pins
soaking and applying cloths
wrap shanks
put in wooden neck pins
trimming sweetbreads
saving and skinning spinal cords
washing and trimming tails
government tagging cripples and suspects
pulling and pushing empty and loaded trucks
cleanup and oiling
tag and hook hides

As seen in the description of the Beef Dress department, each job was highly specialized and described in minute detail in terms of function.

The working conditions varied from one department to another. Since meat is a perishable product, temperatures in the production departments were generally maintained between thirty and fifty degrees. Some departments offered major contrasts in temperature within the department. For instance, the Smokehouse department, which was charged with both the responsibility of smoking the product and chilling it after the smoking operation. In addition, mechanical departments also offered the full range of temperatures, the majority varying from moderate to warm.
Promotions and Transfers

The opportunities for better paying jobs within each of the departments depended upon the seniority of the individual worker. Promotions were defined as a change in job classification, the rate of pay being higher than the job to which the worker was regularly assigned. When a job opening occurred, the workers in the department involved were offered the job. If a number of workers expressed interest, the individual with the most department seniority received the job. If none in the department wanted to accept the job, it was necessary for the company to either transfer a worker from another department or hire a new employee.

In reference to transfer, the Master Agreement stated,

"Employees will be transferred from one department to another according to the following terms: At his own request or the Company's request for a period of not to exceed ninety days without losing his seniority status in his own department."

The procedure for voluntary transfer from one department to another was provided in the contract as follows:

"A record will be kept in the employment office of employees desiring transfers to other departments; and when an opening in one of such other departments exists which will not be filled under

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65 Master Agreement, op. cit., p. 49.
66 Ibid., p. 51.
the promotion provisions of Paragraph 47, such opening will be filled from the list of employees desiring a transfer to such departments in accordance with: First, their plant seniority and Second, their accumulated plant service, provided the employee can perform the job or learn it within a reasonable time.67

The opportunities for transfer from one department to another were available to workers who wanted to apply. The rule of seniority applied only when a number of workers made applications for a single department.

---

67Ibid., p. 52. Paragraph 47, as referred to in the quotation states, "Promotion shall be made according to department seniority, provided the employee can do the work or learn it within a reasonable time that, in case necessity where no applicants are available who can perform the job and there is insufficient time in view of such necessity to teach the applicant the job, a new employee may be hired to fill such vacancy."
CHAPTER V

METHODOLOGY

The methodology employed in this research is, in part, discussed in relation to the major objectives indicated in the research design. The first division, concerned with the direction of mobility involved the establishing of a hierarchy of Plant departments. A second division, concerned with sources of mobility, is designed to utilize data from the first division with a sample of the plant population obtained from personnel records. In addition, a third section contains a discussion on the principle statistical procedures employed in the analysis of data.

I. DEPARTMENT HIERARCHY

In order to focus attention on the direction of inter-department mobility, it was first necessary to ascertain if workers perceived the various plant departments as differentiated according to certain work characteristics.

The interview method was employed to secure this information. A total of thirty workers, one representative from each thirty departments in the plant, were interviewed. The interviewees were also selected as to age, seniority, and race, in an effort to secure a relatively
representative cross section of plant personnel.

The years of age for the interviewees were divided into four categories: (1) under thirty years of age, (2) over thirty and under forty years, (3) over forty and under fifty years, and (4) over fifty years of age. The years of seniority were divided into three classifications: (1) short service--under two years, and (2) medium service--over two and under ten years, and (3) long service--over ten years. The races were classified as white or Negro. A breakdown of the composition of the sample is shown in Table V, page 56.

The age divisions with the greatest number of interviewees were the "30 to 40" and "40 to 50" groups (ten each). A total of seven interviewees were over fifty years of age; three were below thirty years of age. Twenty-one of the informants were white and nine were Negroes.

Only twenty of fifty-five departments which employed blue collar workers were selected to be rated by the interviewees. The selection was done arbitrarily. Departments were representative of all departments in regard to differences in temperature, variances in skill, differences in pay, extent of job security, and nature of supervision. While it is agreed that it would have been more satisfactory to have the interviewees rate each of the fifty-five departments, the length of time required for
## TABLE V

SAMPLE POPULATION FOR INTERVIEWS ON DEPARTMENT RANKINGS BY AGE, SENIORITY AND RACE

<table>
<thead>
<tr>
<th>Years of Age</th>
<th>Seniority</th>
<th>Race</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>Negro</td>
</tr>
<tr>
<td>Under 30 years</td>
<td>Under 2 years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Over 2 &amp; under 10</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Over 10 years</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Over 30 &amp; under 40</td>
<td>Under 2 years</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Over 2 &amp; under 10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Over 10 years</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Over 40 &amp; under 50</td>
<td>Under 2 years</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Over 2 &amp; under 10</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Over 10 years</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Over 50 years</td>
<td>Under 2 years</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Over 2 &amp; under 10</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Over 10 years</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>
completing such an interview made this approach impractical.

The departments selected for rating by the interviewees were as follows: Pork Pack, Pork Dress, Pork Cutting, Smokehouse, Hide Curing, Oil House, Trim Load, Freezer, Beef Warm Variety Meat, Beef Cut, Beef Dress, Beef Load, Table Ready Meat, Canned Meat, Car Icing, Janitors, Garage, Millwright, Steamfitter, and Carpenter.

Each of the thirty interviewees were asked to rate the twenty departments in terms of five departmental characteristics:

(1) General desirability of jobs within the department.
(2) Income received from work within the department.
(3) Compatibility of fellow workers in the department.
(4) Working conditions in the department.
(5) Extent of supervision while performing jobs within the department.

Departmental characteristics were rated by the interviewees in terms of a five point alternate response scale. The possible alternate choices were: (1) poor, (2) fair, (3) average, (4) good, and (5) excellent.

68 This is a modification of the Likert scale. See Rensis Likert, "A Technique for the Measuring of Attitudes," Archives of Psychology, No. 140, June 1932. This scale is based upon the assumption that attitudes are distributed normally. Likert found that there was as much accuracy in the measurement of attitudes in assigned values from one to five as in scoring all responses in terms of sigma values.
By attributing five points to an "excellent" rating, four points to a "good" judgment, three points to an "average" evaluation, two points to a "fair" rating, and one point to a "poor" rating, it was possible to transform the interviewees' evaluations into a single mean score for each department rating in each of the five characteristics.

The remaining thirty-five departments which were rated by the interviewees were arbitrarily ranked the same as those interviewee-rated departments exhibiting comparable characteristics.

The fifty-five departments in the plant were then divided into four hierarchical groupings. The symbols "I," "II," "III," and "IV" were used respectively to refer to four relatively equal mean score departmental groupings extending from the highest to the lowest. Departments in group "I" were the five highest rated by interviewees; group "II" constituted the next to the highest rated groups of departments. Departments in group "III" represented those in the third quartile, while group "IV" departments were the lowest rated.

It was realized that the relatively small sample population presented a problem in securing an accurate evaluation of department groupings. However, the groups did represent a relatively broad band of departments, having
a mean of fourteen departments in each group.

It would have been possible to place the departments in hierarchical groupings on the basis of a single criterion. A possibility might have been the use of the company pay scale as a basis for rating departments, or the ratio of skilled jobs to unskilled and semi-skilled within the department. Hence, the hierarchies would have been formally defined by management. However, research has indicated that workers tended to perceive informal hierarchical structures rather than the formal structure which has determined by management. The interview method employed in this research has made it possible to ascertain informal hierarchically arranged departmental arrangements.

II. SOURCE AND DIRECTION OF MOBILITY

The major sample population to be explored with reference to source and direction of mobility was obtained from the personnel files maintained by the Company. A request was initiated through the Omaha officials of the Major Meat Packing Company for permission to examine the personnel files of blue collar workers who were employed at the plant. Permission was granted by the Chicago

69 Chinoy, op. cit., p. 65.
headquarters of the company. They stipulated that the identity of the workers in the sample would remain anonymous and the initially stated purpose of the research be maintained.

Data for all blue collar workers employed at the plant were on file in the employment office. Records were kept alphabetically by department and worker for each of the fifty-five departments in the plant.

The selection of personnel files for use in the sample was made by use of a table of random numbers. Since it was desired to secure a sample of approximately 20 per cent of the workers, the table of random numbers was used to obtain what would represent every fifth personnel record. The number of records omitted between sample selections varied between one and nine depending upon the number which appeared next in the table. Of the 1,594 personnel records maintained at the employment office, a total of 278 were selected for examination.

The number of items included in each personnel file varied with the individual worker. However, each file contained two items of particular interest to this investigation: (1) Application for Employment and (2)

Employee's Service Record. A copy of these two forms are included in the appendix of this study.

The "Application for Employment" contained information regarding sex, age, educational attainment and nativity. The "Employee's Service Record" was used by the Company to record information regarding the date which the worker was hired, the department and job to which he was assigned, pay rate, job changes and transfers to other departments. The Employee's Service Record also noted if department transfers were initiated by the Company or by the worker. Race of the subjects was not recorded on any record in the personnel file, but was obtained from the personnel manager at the time the file was selected.

The personal characteristics of the sample population, by race, sex, nativity, age and seniority are presented in Table VI, page 62. The sample was found to contain over one-half native born males. The next largest group were Negroes who compose 25 per cent of the sample. Foreign-born males represented 10 per cent. Another 10 per cent was composed of female workers; eight per cent were white and two per-cent were Negro. No foreign born females were found in the sample.
TABLE VI

SAMPLE POPULATION BY SEX, RACE, NATIVITY, AGE, AND SENIORITY

<table>
<thead>
<tr>
<th>Sex, race and nativity</th>
<th>Subjects</th>
<th>Mean Age</th>
<th>Years of Seniority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>per cent</td>
<td></td>
</tr>
<tr>
<td>Male, white, native born</td>
<td>153</td>
<td>55%</td>
<td>41</td>
</tr>
<tr>
<td>Male, white, foreign born</td>
<td>29</td>
<td>10%</td>
<td>51</td>
</tr>
<tr>
<td>Male, Negro</td>
<td>70</td>
<td>25%</td>
<td>40</td>
</tr>
<tr>
<td>Female, White</td>
<td>21</td>
<td>8%</td>
<td>45</td>
</tr>
<tr>
<td>Female, Negro</td>
<td>5</td>
<td>2%</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>100%</td>
<td>42</td>
</tr>
</tbody>
</table>
The mean age of all the subjects was 42 years.

With a mean age of 51 years, foreign-born males represented the oldest subgroup. The youngest age was represented by Negro males (mean age equals 40 years).

The foreign born males were also found to have the greatest number of mean years of seniority (22). Average seniority for the entire sample was fourteen years.

The personal characteristics of each of the workers in the sample population, with the addition of information relating to department transfers, was transferred to file cards for use in the analysis of inter-department mobility. The file cards were arranged so that the employees with a given characteristic could be taken from the file cards of the sample and examined separately, or integrated with other cards for examination in conjunction with other characteristics.

Several items which were of interest were not listed in the personnel records. For instance, the workers' health records were not maintained. It was not possible to relate mobility to the physical characteristics of the workers. In addition, it was not possible to determine if changing health status was a factor in mobility.
Another problem was related to the factor of marital status and number of children. The records listed five status alternatives: single, married, divorced, separated and widowed. Although, the appropriate entries were made and corrections kept up to date, the specific dates on which the changes occurred were not noted. The same was true with respect to the number of dependents; the number was increased or decreased on the service record without regard for the date on which the change occurred.

III. STATISTICAL METHODS

The statistical methods employed in the analysis of data consisted primarily of the "mean" and "chi-square test."

Finding the mean of a sample distribution involved a two step operation: (1) totaling the number of observations, and (2) dividing the result by the number of observations. The formula is as follows: 

\[
\bar{X} = \frac{\sum X}{N}
\]

The mean was preferred over other measures of central tendencies of the type of data and the order in which it was available. As Zeldich has noted in discussing averages:

"We may be primarily interested in inferring the central tendency of a population from a sample value. For this purpose, the mean is more suitable because it fluctuates less on repeated sampling than the median or mode—it is more stable."

---

The chi-square test was utilized to determine if the observed frequencies in a sample distribution varied significantly from the expected frequencies. According to Arkin and Colton, the chi-square test is widely used in testing the "goodness-of-fit." 72

The formula for chi-square when it is desired to test agreement between observed and expected results is as follows: 

\[ x^2 = \frac{(o_e - e_e)^2}{e_e} \]

The expected frequencies were derived by multiplying the total of a column in the sample distribution by the total of a row. The product obtained was divided by the total number of observations in the table. This procedure was followed for each of the cells in the table. The differences between the observed and expected frequencies were then divided by the expected frequency in each case; the sum of the quotients arrived at was interpreted as referring to the value of \( x^2 \). The computed value of \( x^2 \) was then interpreted by referring to a table of critical values for chi-square. The critical value chi-square indicated the probability of obtaining a fit, due to change, as poor or worse than the one obtained. 73

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73 Zelditch, op. cit., p. 366.
In using the table of critical values the degrees of freedom (d. f.) was computed by the following formula:

$$d. f. = (c - 1)(r - 1)$$

$c$ = the number of columns.

$r$ = the number of rows.

Whenever the obtained value of $x^2$ was found to have a probability of .05 or less as compared to the critical value of chi-square, it was considered to be significant.

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CHAPTER VI

FINDINGS

The findings in this research have been divided into five sections. First considered are the person characteristics of the major sample population, as indicated in personnel records at the plant. This topic subdivided into consideration of age, seniority and education, as associated with race, nativity and sex characteristics of the subjects.

An additional sample population of thirty workers is used in the second section. An effort is made to determine if the various departments within the plant are ranked as higher or lower in status. The interview method was employed with this sample population.

After examination of the hierarchical arrangement of departments by the workers, a third section, utilizing the major sample population of 278 workers, relates mobility to the department hierarchy by the sources and directions of movement.

The fourth section is designed to examine mobility in terms of the function performed by the various departments.

The fifth section has as its purpose the consideration of seniority as a factor in the volitional and non-volitional mobility patterns sample population. In a final subtopic, the non-mobile segment of the sample population
is examined by seniority and department status.

I. ANALYSIS OF FINDINGS RELATING TO SELECTED CHARACTERISTICS OF THE SAMPLE POPULATION

The major sample population for this study consisted of slightly less than 18 per cent of the total blue collar work force at the plant. Personnel files of 278 workers, from a total blue collar work force of 1,597, were selected randomly from company records and examined regarding inter-department transfers.

Of the 278 workers whose personnel files were analyzed, a total of 238, or slightly less than 85 per cent of the sample, had experienced some inter-department mobility. The remaining 15 per cent of the workers had not experienced inter-department movement.

Sources of mobility

The sample population is divided into three groups: (1) non-volitionally mobile--those workers who had been transferred from one department to another by management, (2) volitionally mobile--those workers who had experienced at least one self-initiated transfer, and (3) non-mobile--those workers who had remained in the same department to which they were assigned at the time of their employment.
This division mobility categories, as indicated in Table VII, page 70, that 139 workers, or 50 per cent of the sample experienced only management initiated transfers; ninety-nine workers, or approximately 35 per cent had requested a department change; and 15 per cent remained immobile.

The sample population was composed of 55 per cent white, native, born men; this group represented over one-half the number of participants in each of the mobility categories with the exception non-mobile workers. The next largest subgroup consisted of Negro men with 25 per cent of the sample population. Foreign born men represented 10 per cent of the sample; another 10 per cent consisted of women workers of both racial groups.

Age at time of employment

Information was also gathered from the personnel files of the sample population as to the workers' age at the time of employment. The average employment age is presented in Table VIII, page 71, according to sex, race, nativity, and mobility category.

Only minor differences in age were noted. The mean age at time of employment was 28.2 years. A difference of less than one-half year separated the three mobility
### TABLE VII

**NUMBER OF WORKERS BY MOBILITY CATEGORIES ACCORDING TO SEX, RACE AND NATIVITY**

<table>
<thead>
<tr>
<th>Sex, Race and Nativity</th>
<th>Non-Volitionally Mobile</th>
<th>Volitionally Mobile</th>
<th>Non-Mobile</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male, white, native born</td>
<td>80</td>
<td>56</td>
<td>17</td>
<td>153</td>
</tr>
<tr>
<td>Male, white, foreign born</td>
<td>16</td>
<td></td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Male, Negro</td>
<td>28</td>
<td>27</td>
<td>15</td>
<td>70</td>
</tr>
<tr>
<td>Female, white</td>
<td>14</td>
<td>6</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Female, Negro</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>139</td>
<td>99</td>
<td>40</td>
<td>278</td>
</tr>
</tbody>
</table>
### TABLE VIII

Mean age at time of employment divided according to mobility category, age, sex and nativity

<table>
<thead>
<tr>
<th>Sex, Age and Nativity</th>
<th>Non Volitionally Mobile</th>
<th>Volitionally Mobile</th>
<th>Immobile</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male, white native born</td>
<td>28</td>
<td>26</td>
<td>29</td>
<td>27.4</td>
</tr>
<tr>
<td>Male, white foreign born</td>
<td>29</td>
<td>26</td>
<td>28</td>
<td>28.1</td>
</tr>
<tr>
<td>Male, Negro</td>
<td>26</td>
<td>26</td>
<td>27</td>
<td>26.2</td>
</tr>
<tr>
<td>Female, white</td>
<td>30</td>
<td>32</td>
<td>29</td>
<td>30.5</td>
</tr>
<tr>
<td>Female, Negro</td>
<td>34</td>
<td>28</td>
<td>28</td>
<td>29.2</td>
</tr>
<tr>
<td>Average</td>
<td>27.9</td>
<td>28.4</td>
<td>28.1</td>
<td>28.2</td>
</tr>
</tbody>
</table>
groups. The male Negro workers averaged two years younger at time of employment than the mean for all workers in the sample. Female workers of both racial groups were older than any male group.

Seniority

Consideration was given to the factor of seniority in relation to the three mobility categories. Comparison was made on the basis of sex, race and nativity. Data presented in Table IX, page 73, indicated the average seniority of workers by mobility categories differed only slightly. Average seniority of all workers was 14 years. Volitionally mobile workers had one year less seniority than the average; the non volitionally mobile and non-mobile workers had one year more than average. The pronounced seniority differences noted by worker's nativity was not reflected in the three mobility categories. The oldest subgroup, foreign born males, tended to increase the average seniority of non-volitionally mobile workers only slightly.

Education

Personnel records of the workers indicated individual differences in the years of education completed. In order to determine if any noticeable difference appeared in the mean years of education for three mobility categories,
### Table IX

**Seniority in Years for Workers by Mobility Category, Sex, Age, and Nativity**

<table>
<thead>
<tr>
<th>Sex, Age and Nativity</th>
<th>Non-Volitionally Mobile</th>
<th>Volitionally Mobile</th>
<th>Non-Mobile</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male, white, native born</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Male, white, foreign born</td>
<td>25</td>
<td>19</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Male, Negro</td>
<td>15</td>
<td>12</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Female, White</td>
<td>16</td>
<td>14</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Female, Negro</td>
<td>20</td>
<td>15</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Mean</td>
<td>15</td>
<td>13</td>
<td>15</td>
<td>14</td>
</tr>
</tbody>
</table>
Table X, was prepared. Individual tabulations were made by sex, race, and nativity groups as well as mobility categories.

The findings in Table X indicated that the mean educational attainment for all workers in the sample was slightly less than nine and one-half years. The differences were found again to be greater between sex and nativity groups than between mobility categories. Slightly over one-half of a year separated the three mobility categories; the volitionally mobile workers had attended school slightly longer than workers in either of the other mobility categories. Foreign born workers were lower in educational attainment than any other subgroup. Although female workers in both racial groups indicated more years of schooling completed, the number of participants was less than five in the majority of categories, which gave disproportionate weight to the findings.

**Race**

Having examined personal characteristics of the five groups according to race and nativity groups separately, a comparative analysis of the differences which appeared in the groups was attempted. The significance of the mobility relationship was assessed by chi-square employing two
### TABLE X

**MEAN YEARS OF EDUCATION FOR WORKERS BY MOBILITY CATEGORY, SEX, AGE AND NATIVITY**

<table>
<thead>
<tr>
<th>Sex, Age and Nativity</th>
<th>Non-volitionally Mobile</th>
<th>Volitionally Mobile</th>
<th>Non-Mobile</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male, white native born</td>
<td>9.44</td>
<td>9.31</td>
<td>9.64</td>
<td>9.42</td>
</tr>
<tr>
<td>Male, foreign born</td>
<td>8.62</td>
<td>8.33</td>
<td>8.66</td>
<td>8.55</td>
</tr>
<tr>
<td>Male, Negro</td>
<td>8.39</td>
<td>10.79</td>
<td>9.26</td>
<td>9.50</td>
</tr>
<tr>
<td>Female, White</td>
<td>9.65</td>
<td>11.17</td>
<td>11.00</td>
<td>10.15</td>
</tr>
<tr>
<td>Female, Negro</td>
<td>11.00</td>
<td>11.00</td>
<td>8.00</td>
<td>10.40</td>
</tr>
<tr>
<td>Mean</td>
<td>9.17</td>
<td>9.80</td>
<td>9.34</td>
<td>9.42</td>
</tr>
</tbody>
</table>
racial groups and the mobility categories. The racial
differences were analyzed by combining nativity and sex
with their respective racial group. Foreign born men and
white women were combined to make the "white" racial groups.

Table XI presents the results of this analysis. The
differences between the "observed" and "expected" frequ­
"encies in the mobility were squared and divided by the
number expected in each case to arrive at the sum of the
quotients represented by \(X^2\). The value of \(X^2\) was found
to be 6.73 which indicated significance at the .05 level.
White workers tended to be moved more frequently by
management, while Negro workers showed a greater tendency
toward volitional mobility, or remained immobile.

**TABLE XI**

**COMPARISON OF THE SIGNIFICANCE OF DIFFERENCES BETWEEN RACE AND OBSERVED AND EXPECTED FREQUENCIES OF MOBILITY CATEGORIES**

<table>
<thead>
<tr>
<th>Mobility Category</th>
<th>White Observed</th>
<th>White Expected</th>
<th>Negro Observed</th>
<th>Negro Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-volitionally Mobile</td>
<td>110</td>
<td>101.5</td>
<td>29</td>
<td>37.5</td>
</tr>
<tr>
<td>Volitionally Mobile</td>
<td>69</td>
<td>72.3</td>
<td>30</td>
<td>26.7</td>
</tr>
<tr>
<td>Non-mobile</td>
<td>24</td>
<td>29.2</td>
<td>16</td>
<td>10.8</td>
</tr>
</tbody>
</table>

\[ N = 278 \quad X^2 = 6.73 \quad df = 2 \quad p < .05 \]
Nativity

An examination was made of the nativity of the sample population. It was found that foreign born workers totaled 29, in comparison to 249 who were native born. Of every five foreign born workers, one was non-mobile as compared to one of seven native born workers. The volitionally mobile category contained slightly more than one out of three native born worker; in the foreign born distribution, one of four workers was in the volitional category.

As indicated in Table XII the $X^2$ test was utilized to examine whether a significant difference existed between

<table>
<thead>
<tr>
<th>Mobility Category</th>
<th>White Observed</th>
<th>White Expected</th>
<th>Negro Observed</th>
<th>Negro Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-volitionally Mobile</td>
<td>123</td>
<td>125.0</td>
<td>16</td>
<td>14.5</td>
</tr>
<tr>
<td>Volitionally Mobile</td>
<td>92</td>
<td>89.1</td>
<td></td>
<td>10.3</td>
</tr>
<tr>
<td>Non-mobile</td>
<td>34</td>
<td>35.9</td>
<td>6</td>
<td>4.2</td>
</tr>
</tbody>
</table>

$N = 278$, $X^2 = 2.61$, $df = 2$, $P > .05$
"observed" and "expected" frequencies when nativity was compared to the three mobility categories. Because the probability was found to be less than .05, the differences were not considered significant.

Sex

An examination of the differences in sex as a factor in mobility category distribution was impractical. The number of female workers in the non-mobile category (N = 2) rendered a chi-square analysis unsound.

II. DEPARTMENT HIERARCHY

Before it was possible to relate mobility to source and direction, it was necessary to ascertain if the workers perceived the various departments in the plant as having different status.

The sample of thirty workers were asked to rate the twenty selected departments as to five departmental characteristics: (1) job desirability, (2) pay, (3) working conditions, (4) fellow workers, and (5) supervision. The possible rating choices were as follows: 1 = poor; 2 = fair; 3 = average; 4 = good; 5 = excellent. It was

75It has been stated that X^2 analysis should not be applied to tables in which cell entries are lower than 5. See, for instance, Morris Zelditch, op. cit., p. 284.
therefore possible for a department to be awarded an excellent rating on each of the five characteristics and to receive a total of twenty-five points. This, translated into a mean score for the five characteristics, would equal 5.00. The lowest possible mean score which a department might receive was 1.00, indicating a "poor" rating on each characteristic.

The mean score received by each of the twenty departments in each of the five characteristics is presented in Table XIII, page 82. Departments are listed in the table in descending order, with the department listed first receiving the highest total mean score; the department with the lowest total mean score was placed at the bottom of the table.

The mean score received by the departments as to the work characteristics was 2.90. Among the five characteristics, "pay" received the highest overall average with a score of 3.13. This was followed closely by "fellow workers" with a rating of 3.11. The two characteristics which were rated nearest the total mean were "extent of supervision" and "job desirability" which received scores of 2.89 and 2.80 respectively. Lowest rated of the five work characteristics was "working conditions" which received a score of 2.57, or slightly over one-half the distance between "fair" and
"average" on the five point rating scale which was employed. Workers perceived "working conditions" as rating "poor" to "fair" in five of the twenty departments; only three departments were accorded above "average" ratings as to this criterion. Among the ratings given to the departments as to the other characteristics -- "pay" "general desirability," "fellow workers," and "supervision" -- only four of the twenty departments were judged in the "poor" to "fair" category. Of these four departments, three were ranked in this manner as to "desirability;" the other was rated to the same extent as to "pay."

The total mean scores for each of the evaluated departments as to five departmental characteristics has been summarized in Table XIII. They are hierarchically arranged from 3.59, the total mean score received by the "beef cut" department, to 1.97, the score derived from all the judgments awarded the "hide curing" department. Other highly rated departments include the following: "Millwright" (3.51), "Carpenter" (3.49), "Garage" (3.48), and Steamfitter" (3.48). Lowly rated departments included "Freezer" (2.40), "Car Icing" (2.40), "Beef Dress" (2.45), and "Pork Dress" (2.48).

As the total mean score column in Table XIII indicated there appeared to be a trend in the average score which a
department received, depending if it were mechanical, service, or production oriented as to function. The three departments which were mechanical in nature were concentrated toward the upper extreme of the hierarchy. The four service departments were scattered throughout the rank order. The thirteen production departments tended to be concentrated toward the middle and lower extreme of the ranking order.

Based on the perceived mean evaluations of the interviewees, and interpolation of the remaining 35 departments which were thought to exhibit similar characteristics, the plant departments were divided into four hierarchical groupings. The Symbols "I," "II," "III," and "IV" were used respectively to refer to four relatively equal mean score departmental groupings extending from the highest to the lowest.

The departments of "Group I" were those which received scores in the upper one-quarter of the rating scale, or constituted self-rated departments which possessed similar characteristics. Departments in Group II ranked below Group I departments and above the mean for total score in the rating scale. Group III and Group IV were departments in the

---

76 An exception in the ranking of production departments was the "Beef Cut" which scored the highest rating of any department. No other production department ranked in the upper one-quarter of the evaluations.
TABLE XIII

EVALUATIONS OF 20 DEPARTMENTS ACCORDING TO 5 DEPARTMENTAL CHARACTERISTICS BY 30 WORKERS

<table>
<thead>
<tr>
<th>Department</th>
<th>Desirability of Jobs</th>
<th>Pay</th>
<th>Fellow Workers</th>
<th>Working Conditions</th>
<th>Supervision</th>
<th>Total Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef Cut</td>
<td>3.73</td>
<td>4.00</td>
<td>3.40</td>
<td>3.47</td>
<td>3.33</td>
<td>3.59</td>
</tr>
<tr>
<td>Millwright</td>
<td>3.60</td>
<td>4.27</td>
<td>3.53</td>
<td>3.13</td>
<td>3.00</td>
<td>3.51</td>
</tr>
<tr>
<td>Carpenter</td>
<td>3.73</td>
<td>4.07</td>
<td>3.67</td>
<td>2.93</td>
<td>3.07</td>
<td>3.49</td>
</tr>
<tr>
<td>Garage</td>
<td>3.33</td>
<td>3.87</td>
<td>3.47</td>
<td>3.33</td>
<td>3.40</td>
<td>3.48</td>
</tr>
<tr>
<td>Steamfitter</td>
<td>3.53</td>
<td>4.07</td>
<td>3.67</td>
<td>2.87</td>
<td>3.00</td>
<td>3.43</td>
</tr>
<tr>
<td>Canned Meat</td>
<td>3.07</td>
<td>3.00</td>
<td>3.27</td>
<td>2.93</td>
<td>3.00</td>
<td>3.13</td>
</tr>
<tr>
<td>Trim Load</td>
<td>3.07</td>
<td>3.40</td>
<td>3.27</td>
<td>2.87</td>
<td>3.07</td>
<td>3.13</td>
</tr>
<tr>
<td>Pork Cut</td>
<td>3.07</td>
<td>3.27</td>
<td>3.27</td>
<td>2.73</td>
<td>3.07</td>
<td>3.08</td>
</tr>
<tr>
<td>T. R. Meat</td>
<td>3.13</td>
<td>2.93</td>
<td>3.13</td>
<td>2.93</td>
<td>2.12</td>
<td>3.05</td>
</tr>
<tr>
<td>Beef Load</td>
<td>2.93</td>
<td>3.40</td>
<td>3.00</td>
<td>2.80</td>
<td>3.07</td>
<td>3.04</td>
</tr>
<tr>
<td>Smokehouse</td>
<td>2.87</td>
<td>2.73</td>
<td>3.00</td>
<td>2.87</td>
<td>2.73</td>
<td>2.84</td>
</tr>
<tr>
<td>Pork Pack</td>
<td>2.73</td>
<td>3.07</td>
<td>2.87</td>
<td>2.40</td>
<td>2.67</td>
<td>2.75</td>
</tr>
<tr>
<td>B. W. V. Meat</td>
<td>2.73</td>
<td>2.87</td>
<td>2.80</td>
<td>2.47</td>
<td>2.67</td>
<td>2.71</td>
</tr>
<tr>
<td>Oil House</td>
<td>2.67</td>
<td>2.40</td>
<td>2.87</td>
<td>2.20</td>
<td>2.60</td>
<td>2.55</td>
</tr>
<tr>
<td>Janitor</td>
<td>2.60</td>
<td>1.73</td>
<td>2.93</td>
<td>2.73</td>
<td>2.60</td>
<td>2.52</td>
</tr>
<tr>
<td>Pork Dress</td>
<td>2.00</td>
<td>3.07</td>
<td>2.80</td>
<td>1.93</td>
<td>2.60</td>
<td>2.48</td>
</tr>
<tr>
<td>Beef Dress</td>
<td>1.80</td>
<td>3.40</td>
<td>2.73</td>
<td>1.93</td>
<td>2.40</td>
<td>2.45</td>
</tr>
<tr>
<td>Car Icing</td>
<td>2.13</td>
<td>2.40</td>
<td>2.80</td>
<td>1.87</td>
<td>2.80</td>
<td>2.40</td>
</tr>
<tr>
<td>Freezer</td>
<td>1.80</td>
<td>2.47</td>
<td>3.20</td>
<td>1.53</td>
<td>3.00</td>
<td>2.40</td>
</tr>
<tr>
<td>Hide Curing</td>
<td>1.40</td>
<td>2.13</td>
<td>2.47</td>
<td>1.40</td>
<td>2.47</td>
<td>1.97</td>
</tr>
<tr>
<td><strong>Total Mean</strong></td>
<td><strong>2.80</strong></td>
<td><strong>3.13</strong></td>
<td><strong>3.11</strong></td>
<td><strong>2.57</strong></td>
<td><strong>2.89</strong></td>
<td><strong>2.90</strong></td>
</tr>
</tbody>
</table>
lower one-half of the scale, subdivided in the same manner as the two upper groups. Additional unrated departments were added to the groups on the basis of similarities in characteristics.

III. MOBILITY BY SOURCE AND DIRECTION

The three mobility categories listed in the first section of the findings were temporarily abandoned in favor of examining the directions of mobility by the mobility source. Since the 40 workers who remained in the same department throughout their employment were not involved in the source of direction of mobility, this group was not utilized in the examination of data in this section.

The purpose of this section was to examine the two sources of mobility, volitional and non-volitional as compared with three directions of mobility: (1) upward, (2) parallel, and (3) downward. The sources were ascertained by entries in the personnel files of the workers. Directions of mobility utilized information obtained from interviews with workers as to the existence of a hierarchy of plant departments. The symbols "I," "II," "III," and "IV," as described earlier, were used to refer to four departmental groupings, extended from the highest to the lowest departmental mean ranking. Inter-department mobility was examined
in relation to movement of workers between and among the symbols representing the four-fold departmental hierarchy.

The direction of mobility was analyzed in terms of whether the movement was upward, parallel or downward. For example, if a worker moved from one department portrayed by mobility symbol "II" to another department rating a symbol "I," upward mobility was represented. If the converse occurred (I to II), the mobility was downward. An example of parallel mobility referred to a situation where a worker moved from one department rating a symbol "II" to another department with a symbol "II."

The number of workers, by source of mobility, was divided between 139 non-volitional and 99 workers whose mobility pattern involved a volitional department change. It was found that a total of 81 workers had been upwardly mobile, 125 had followed a parallel pattern and 32 were employed in departments of lower status than that which they had initially been assigned.

The statistical significance of this mobility relationship was assessed by chi-square employing the sources and directions of the total mobile sample population, as indicated in Table XIV.

The difference in direction of mobility by "source" was found to be significant at the .05 level. It was
TABLE XIV

COMPARISON OF THE SIGNIFICANCE OF DIFFERENCES BETWEEN SOURCES OF MOBILITY WITH OBSERVED AND EXPECTED FREQUENCIES IN MOBILITY DIRECTION

<table>
<thead>
<tr>
<th>Source</th>
<th>Direction</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Observed</td>
<td>Ex-</td>
<td>Observed</td>
<td>Ex-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>served</td>
<td>pected</td>
<td>served</td>
<td>pected</td>
</tr>
<tr>
<td>Non-volitionally</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td></td>
<td>37</td>
<td>47.3</td>
<td>79</td>
<td>73.0</td>
</tr>
<tr>
<td>Volitionally</td>
<td></td>
<td>44</td>
<td>33.7</td>
<td>46</td>
<td>52.0</td>
</tr>
<tr>
<td>Mobile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[
N = 238 \quad \chi^2 = 8.95 \quad df = 2 \quad P < .05
\]

determined that volitionally mobile workers were upwardly more mobile in significantly greater proportion than were the non-volitional workers and, conversely, downward mobility was more characteristic of non-volitional workers than volitionally mobile workers.

A more detailed presentation of the differences which appeared between volitionally mobile and non-volitionally mobile workers are portrayed in Table XV. White and Negro workers are presented separately, by source of mobility, because it was found in earlier data (Table XI, page 76) that the races were significantly different in their relationship to the mobility category. The mobility patterns of workers were presented, using the six possible combinations...
### TABLE XV

**MOBILE WORKERS BY RACE, SOURCE AND DIRECTION OF MOBILITY**

<table>
<thead>
<tr>
<th>Direction of Mobility</th>
<th>Voluntary</th>
<th>White Non-voluntary</th>
<th>Negro Voluntary</th>
<th>Negro Non-voluntary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upward IV to III</td>
<td>4</td>
<td>3</td>
<td>--</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>IV to II</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>IV to I</td>
<td>11</td>
<td>4</td>
<td>3</td>
<td>--</td>
<td>18</td>
</tr>
<tr>
<td>III to II</td>
<td>1</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>III to I</td>
<td>2</td>
<td>2</td>
<td>--</td>
<td>--</td>
<td>4</td>
</tr>
<tr>
<td>II to I</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>--</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>32</td>
<td>13</td>
<td>5</td>
<td>81</td>
</tr>
<tr>
<td>Parallel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV to IV</td>
<td>12</td>
<td>24</td>
<td>11</td>
<td>17</td>
<td>64</td>
</tr>
<tr>
<td>III to III</td>
<td>10</td>
<td>14</td>
<td>3</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>II to II</td>
<td>4</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>I to I</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>--</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>59</td>
<td>16</td>
<td>20</td>
<td>125</td>
</tr>
<tr>
<td>Downward</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I to II</td>
<td>--</td>
<td>2</td>
<td>--</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>I to III</td>
<td>1</td>
<td>1</td>
<td>--</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>I to IV</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0</td>
</tr>
<tr>
<td>II to III</td>
<td>1</td>
<td>4</td>
<td>--</td>
<td>--</td>
<td>5</td>
</tr>
<tr>
<td>II to IV</td>
<td>4</td>
<td>6</td>
<td>--</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>III to IV</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>19</td>
<td>7</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>Grand Total</td>
<td>69</td>
<td>110</td>
<td>30</td>
<td>29</td>
<td>238</td>
</tr>
</tbody>
</table>
of movement within the "upward" and "downward" directions, and four parallel movements between departments of equal status.

Considering the "upward" movement in the sample, it was found that among white workers 35 per cent or 63 of 179, moved to departments of higher status. The difference in percentage of upward mobility among white workers was related to the source of the mobility. Over 46 per cent of those volitionally mobile (31 of 67) were transferred to higher status departments as compared to 29 per cent (32 of 110) non-volitionally mobile workers.

The degree of upward movement was also noteworthy. The number of white workers who moved from Group IV departments, the lowest, to Group I departments, the highest, was fifteen. This was composed of eleven volitionally mobile and four non-volitionally mobile workers. The greatest numerical non-volitional upward movement was between Group III and Group II with nine. Only one volitionally mobile worker was found in this category.

The proportionate number of upwardly mobile Negro workers was even greater than among white workers, when the source was considered. Over twice the number of Negroes moved upward volitionally as compared to those moved non-volitionally. Findings, regarding the degree of upward movement, are limited by number of participants. However, in movement, are from
Group IV to Group I Category (lowest to highest), three Negro workers requested transfer while none were moved non-volitionally.

Considering the source of mobility, the downward movement of workers presented the opposite picture. A greater proportionate number of both white and Negro workers were moved to lower status departments non-volitionally, than those who requested downward movement. Approximately 17 per cent of the non-volitionally mobile workers were transferred downward while only 10 per cent requested such a change. Interestingly, no worker was either transferred by management or requested transfer from Group I to Group IV (highest to lowest) departments.

The parallel movement of workers, from departments on one group level to other departments on the same level, presented the greatest racial contrast. Regardless of the source of mobility, Negro workers tended to remain in departments of similar status level in greater proportionate numbers than did white workers. Slightly less than two-thirds of the Negro workers displayed parallel mobility patterns as compared to one-half of the white workers.

Another interesting aspect, relating to the race of workers in the sample, concerned the department groups in
which workers began employment with the company. Of the mobile white workers, 39 per cent (69 of 177) began their careers at the plant in Group IV departments. This compares with 56 per cent (40 of 71) of Negro workers, whose first job assignments were in a department rating as having the lowest status. A total of fifteen white workers were originally employed in departments rated as Group I; only one Negro was hired to serve in this high status group.

IV. MOBILITY BY DEPARTMENT FUNCTION

In determining the hierarchical ranking of departments by the workers, it was found that the function the department performed in the overall plant operation appeared to be related to the rating received. The function of the departments were divided into three types: (1) productive departments which dealt directly with the processing and preparation of products; (2) service departments, which provided facilities and services to the productive departments or to personnel; and (3) mechanical departments, which were concerned with the maintenance of plant facilities and equipment.

The participants in volitional and non-volitional mobility were divided by the function of the department to
which transfer was made as indicated in Table XVI.

**TABLE XVI**

COMPARISON OF THE DIFFERENCE IN OBSERVED AND EXPECTED FREQUENCIES BETWEEN MOBILITY CATEGORIES AND FUNCTION OF DEPARTMENT

<table>
<thead>
<tr>
<th>Source of Mobility</th>
<th>To Production</th>
<th>To Service</th>
<th>To Mechanical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ob- served</td>
<td>Ex- served</td>
<td>Ob- served</td>
</tr>
<tr>
<td>Non-volitionally</td>
<td>103 96.4</td>
<td>25 25.1</td>
<td>11 17.5</td>
</tr>
<tr>
<td>Mobile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volitionally</td>
<td>62 68.6</td>
<td>18 17.9</td>
<td>19 12.5</td>
</tr>
<tr>
<td>Mobile</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ N = 238 \quad x^2 = 6.87 \quad d.f. = 2 \quad P < .05 \]

It was found that 165 workers, or 69 per cent of the sample transferred to production departments; a total of 43 workers, or 18 per cent, transferred to service departments and 30 workers, representing 13 per cent, were moved to mechanical departments. Differences between the volitional and non-volitional workers was assessed by chi-square employing department function. As shown in Table XVI, the difference was found to be significant at the .05 level. Volitionally mobile workers tended to transfer to mechanical departments more frequently than would be expected by chance. The non-volitionally mobile tended to be transferred to production departments.

A further examination was made, considering not only the destination of the mobility, but the origin as well.
A total of nine different movements were possible within the three divisions of departments by function. For example, a worker in a production department could be transferred: (1) to another production department, (2) to a service department, or (3) to a mechanical department.

As shown in Table XVII, the greatest number of workers were transferred from one production department, to another production department. A total of 61 per cent of the total mobile sample were in this category. A total of nineteen workers, or 7 per cent of the sample, moved from either service or mechanical departments to production.

A major difference was found between the white and Negro workers. A total of fifty-seven Negro workers, or 96 per cent of the group, moved either to another production department or from service to production. The number of white workers, moving among production departments, or from other departments, totaled 108 or 60 per cent of the group. No Negro workers were found transferring either in or out of mechanical departments. A total of thirty white workers transferred to mechanical department, either from other departments, or among mechanical departments.

V. MOBILITY AND SENIORITY

Although earlier findings (Table VI, page 62 and IX, page 73) indicated that only slight differences appeared in
TABLE XVII

NUMBER OF WORKERS TRANSFERRED BETWEEN DEPARTMENTS
BY DEPARTMENT FUNCTION ACCORDING TO
RACE AND TYPE OF MOBILITY

<table>
<thead>
<tr>
<th>Change of Department</th>
<th>White Volitional</th>
<th>Non-volitional</th>
<th>Negro Volitional</th>
<th>Non-volitional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product to product</td>
<td>26</td>
<td>66</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>Product to Service</td>
<td>11</td>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Product to Mechanical</td>
<td>10</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Service to Service</td>
<td>6</td>
<td>12</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Service to Product</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Service to Mechanics</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mechanical to Mechanical</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mechanical to Product</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mechanical to Service</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>69</strong></td>
<td><strong>110</strong></td>
<td><strong>30</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>
the mean seniority of the volitionally mobile and non-
vollitionally mobile workers, the direction of mobility had
not as yet been considered.

Mobile workers

In order to examine the seniority of the mobile
sample, the workers were divided into three seniority groups
as follows: (1) short service-- less than two years service,
(2) medium service-- two years but less than ten, and (3)
long service-- ten years and over.

Data are presented in Table XVIII, page 94, demonstrating
the relationship between sources and directions of mobility
by race and seniority level. Most of the mobile workers,
vollitional as well as non-vollitional, had been employed at
the plant for ten years or longer. To be specific, 145 of
179 white mobile workers (82 per cent) fell into this seniority
category; forty-seven of 60 Negro mobile workers (78 per
cent) have been employed for ten years or longer. Among
the "long service" mobile whites, only fifty-eight moved
to a higher status. In contrast, eighty-seven white workers
had a mobility pattern which was either "parallel" or "down-
ward." This trend also existed among the mobile Negroes.
Only fourteen "long service" Negroes were upwardly mobile,
as compared to thirty-three who experienced either "down-
ward" or parallel" mobility.
### TABLE XVIII

RELATIONSHIP OF SENIORITY TO SOURCED AND DIRECTIONS OF MOBILITY BY RACE

<table>
<thead>
<tr>
<th>Race</th>
<th>Seniority</th>
<th>Upward Voluntary</th>
<th>Parallel Voluntary</th>
<th>Downward Voluntary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Less than 2 years</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>2 years &amp; under 10</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>10 years &amp; over</td>
<td>28</td>
<td>30</td>
<td>18</td>
</tr>
<tr>
<td>Negro</td>
<td>Less than 2 years</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negro</td>
<td>2 years &amp; under 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negro</td>
<td>10 years &amp; over</td>
<td>9</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>44</td>
<td>37</td>
<td>46</td>
</tr>
</tbody>
</table>
A comparison of the significance between expected and observed frequencies employing direction of mobility and two seniority levels was analyzed in terms of chi-square. As Table XIX reveals, the data was not found statistically significant at the .05 level.

**TABLE XIX**

**COMPARISON OF THE SIGNIFICANCE OF DIFFERENCES IN OBSERVED AND EXPECTED FREQUENCIES DIRECTION OF MOBILITY AND SENIORITY LEVEL**

<table>
<thead>
<tr>
<th>Seniority</th>
<th>Direction</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Upward</td>
<td>Ex.</td>
<td>Obs.</td>
<td>Ex.</td>
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<tr>
<td>Under 10 years</td>
<td>9</td>
<td>15.7</td>
<td>28</td>
<td>24.1</td>
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<tr>
<td>10 years and over</td>
<td>72</td>
<td>65.3</td>
<td>97</td>
<td>100.9</td>
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<tr>
<td></td>
<td>Downward</td>
<td>Ex.</td>
<td>Obs.</td>
<td>Ex.</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>6.2</td>
<td>23</td>
<td>25.8</td>
</tr>
</tbody>
</table>

**Non-mobile workers**

Whereas 238 workers had experienced one form of mobility or the other, a total of forty workers were non-mobile. This group, representing nearly 15 per cent of the total sample, had seen service in only one department during the period they had been employed.

77 There were not a sufficient number of mobile "short service" workers for each of the "direction cells" to make a chi-square analysis possible. Consequently, "short service" workers were combined with "medium service" for the analysis.
In Table XX, non-mobile workers in the sample are shown according to seniority and the departmental group in which they were employed. Of the forty non-mobile workers nine were "short service" workers who had been employed less than two years. Twenty-six of the forty workers were members of departmental Group IV. In other words, these individuals had begun their work at the lowest department level and had remained there throughout their employment.

### TABLE XX

**NON-MOBILE SUBGROUP BY RACE, SENIORITY AND DEPARTMENTAL GROUP**

<table>
<thead>
<tr>
<th>Race</th>
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<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>Total</th>
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<tr>
<td>White</td>
<td>Under 2 years</td>
<td>2</td>
<td>3</td>
<td>--</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>White</td>
<td>2 years &amp; under</td>
<td>--</td>
<td>2</td>
<td>--</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>White</td>
<td>10 years &amp; over</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Negro</td>
<td>Under 2 years</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Negro</td>
<td>2 years &amp; over</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0</td>
</tr>
<tr>
<td>Negro</td>
<td>10 years &amp; over</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>26</td>
<td>40</td>
</tr>
</tbody>
</table>
CHAPTER VII

SUMMARY AND CONCLUSIONS

This chapter is divided into two sections. The first section contains a summarization of the findings. An analysis of the findings is presented in the section on interpretation. A final subdivision presents a consideration for further research.

I. SUMMARY

A purpose of this research was to determine the extent of inter-department mobility by source and direction of blue collar workers in a meat packing plant under investigation.

In order to achieve this objective, a sample population of the blue collar work force was selected randomly from personnel files maintained by the company. The characteristics of the sample population indicated that a slight majority (55 per cent) of plant workers were white, native born men. The next largest group was composed of Negro workers who represented one-quarter of the sample population. Foreign born men represented 10 per cent of the population; the remaining 10 per cent was composed of white and Negro women. No foreign born women were found in the sample.

Workers were divided into mobility categories, depending upon whether movement between departments in the plant had been
sponsored by the company (non-volitional), or a request for change had been initiated by the workers (volitional). A third group was composed of those workers who had remained in the same department to which they were initially assigned (non-mobile).

It was found that fifty per cent of the workers were non-volitionally mobile; thirty-five per cent had experienced volitional mobility. In contrast, only fifteen per cent had been non-mobile.

Selected personal characteristics of the workers were examined in relation to the mobility categories. The mean age of all workers at the time of employment was found to be slightly over twenty-eight years. Age differences between mobility categories were found to be slight. The number of years of education achieved in relationship to the mobility categories also exhibited slight differences. The volitionally mobile workers, on the average, had attended school for one-half year longer than the non-volitional and non-mobile workers. The seniority of volitionally mobile workers was found to be two years less than either non-volitionally mobile or non-mobile workers.

Having examined the sample characteristics collectively, the race, nativity and sex of the sample population was compared with each of the mobility categories. The differences were found to be significant. White workers dis-
played significantly more non-volitional mobility than did Negro workers. The nativity of the subjects was not found significant when compared to the mobility categories. Since the number of females in the sample population was too small for a chi-square analysis, no comparison was made on the basis of sex.

Of the characteristics examined, race appeared to be the most significant in determining whether a worker would be volitionally mobile, non-volitionally mobile, or non-mobile.

In order to ascertain whether the source of mobility had a significant bearing upon the direction of movement, it was necessary to determine if the workers perceived the various departments in the plant as possessing differentiated status characteristics. An additional sample of thirty workers was interviewed in an effort to discover their evaluations of selected departmental characteristics.

It was found that the sample of workers perceived the departments as rated differently in the various status characteristics evaluated. Generally, the departments which were mechanically oriented in terms of function were rated highest. The majority of production departments were conferred lower ratings, and service departments were scattered throughout the rank order.

By computing mean scores of the status characteristics for each of the departments, four hierarchically arranged
departmental groups were derived. Movement displayed by
the volitional and non-volitional mobile workers was
examined in relation to the groups of departments represented
by the fourfold department hierarchy.

Through employment of the chi-square test of sign-
ificance, it was found that volitionally mobile workers
moved upward in the department hierarchy in a significantly
greater proportion than did the non-volitional mobile workers.

Since the departments appeared to be ranked by the
workers relative to the primary departmental function (pro-
duction, service or mechanical), a comparison was made of
the volitional and non-volitional movement using function
as a basis. A chi-square analysis revealed that volition-
ally mobile workers had transferred more frequently to
mechanical departments, and less frequently to production
departments than would be expected by chance. The opposite
was true of non-volitional mobile workers. The expected
proportions of workers in both mobility categories had ex-
perienced transfer to service departments.

The influence of seniority on upward, parallel or
downward movement of workers was not found to be significant.

Another finding revealed that among the non-mobile workers,
a majority were still employed in the lowest group of depart-
ments to which they were originally assigned.
II. CONCLUSION

Interpretations

The study described indicated several aspects of mobility which, it appeared, had been neglected to some extent in earlier research.

It should be noted that the findings indicated a great deal of inter-department mobility had occurred in the plant. Over four-fifths of the work force experienced one type of mobility or another. With this percentage of workers transferred from the department to which they were originally assigned, the opportunities for a better work assignment would appear probable.

The distinction between volitional and non-volitional mobility, utilized in this research, appeared to be valid. Of the workers in the sample, thirty-five per cent had experienced a self-initiated department transfer. This may indicate that some information had been made available to the workers advising them of their ability to request a department change. Furthermore, department changes were executed as the result of these requests. The worker in such a setting controlled, to some extent at least, the destiny of his work career.

The findings indicated that volitionally mobile workers were transferred upwardly on a hierarchy of department desirability in significantly greater proportion than were the non-volitionally
mobile workers. The ability to make a personal choice of department in which to serve, rather than have the selection made by the company, could be interpreted as a reason for the upward trend. The hierarchy of departments on which mobility was measured resulted from interviews with workers. The upward volitional movement, it would appear, reflected the validity of the hierarchy from the workers point of view.

The differences in individual characteristics of the volitional and non-volitional workers with regard to age at the time of employment, seniority and education, could not, of themselves, be considered as sufficient to explain the greater upward movement of the volitionally mobile.

The race of the workers appeared to be of considerable importance in determining whether or not a worker would be transferred by the company, request a change, or remain in the department in which he received his initial work assignment. The Negro workers in the sample were prone to request a department change, or remain non-mobile; white workers were more non-volitionally mobile. In other words, the company appeared inclined to transfer white workers in proportionately greater numbers than Negro workers. The data indicated that if workers were desirous of advancing to a department exhibiting more favorable characteristics, requesting
change was a more satisfactory way of achieving this objective than expecting the company to sponsor a change. Therefore, it could be assumed that mobile Negro worker, having requested proportionately more transfers, would have ascended higher to more favorably perceived departments than white workers. This was not found to be the case. The number of Negro workers in the upper departmental groups was, in fact, found to be less than the proportionate number of white workers. This difference may be related to two other findings:

1) The department to which workers were assigned at the time of employment-- The corresponding percentages of Negro workers hired for each of the department groups was not equal as compared to that of white workers. The tendency was for Negro workers to be hired for jobs in lower status departments. More specifically, the majority of Negroes were originally employed in departments having the lowest ratings.

2) The range of upward movement was less with Negro workers than with white workers-- There appeared to be an obstacle which restricted entrance of Negro workers into mechanical departments. The workers generally rated mechanical departments higher than
productive departments. It is evident, therefore, that restricted movement of Negro workers to mechanical departments had a tendency to shorten the range of mobility potential.

These two factors—starting in lower rated departments, and lacking opportunities to enter certain higher status departments—resulted in Negro workers either (1) requesting a department change that was either parallel, or of a relatively short upward range, or (2) remaining non-mobile. This finding contradicts the opinion expressed by the majority of Omaha union officials as reported by Hope. While it appears to be true that the Negro workers are offered an opportunity to display volitional mobility, it is evident that either, (1) their personal choice excludes entrance into mechanical departments, or (2) Negroes are restricted by some unwritten law governing their movement.

A factor which earlier studies considered of primary importance in explaining intra-plant mobility was seniority

78 Hope, op. cit., pp. 30-33. As reported on pages 27-28 of this text, the majority of union officials were of the opinion that no racial discrimination appeared in Omaha meat packing plants. The minority felt that the promotion of racial groups was restricted to changes within the department or to departments that were predominantly semi-skilled in the type of jobs available.
In this research, seniority appeared to be of secondary importance. While movement from one job to another within a department has its basis in the seniority system, the movement from one department to another appeared to be less rigidly controlled by the factor of seniority. A second consideration, that of individual initiative to request a transfer, tended to be more significant than seniority.

**Recommendations**

The broad generalization of findings in this research would appear to be unwarranted. However, since policies relating to volitional department changes appear to be incorporated in union contracts with a number of mass production industries, the findings of this research might present a more general view of applicability than would be expected in a single investigation. Additional studies, using a similar methodological approach and the distinction between volitional and non-volitional movement, would serve to verify or invalidate the findings of this investigation.

No assumptions were made in this research regarding reasons for vertical or parallel movement between the departments. Possible one of the most fruitful investigations related to volitional mobility might be directed toward
primary group relationships. Inter-department mobility results in a change in the composition of the primary work group. The different patterns of association, or the lack of social integration on the part of the worker, could result in volitional mobility. In other words, the reason a worker displayed volitional mobility might be related to a desire for a more satisfactory primary group association, rather than the fulfillment of the American ideal of upward social movement.

An approach to volitional mobility patterns utilizing changes in family status might also prove worthwhile. Since upward mobility appeared to be more characteristic of patterns involving volitional movement, a change from single to married status, or an increased number of children, might have a bearing on the decision to request a change to a higher status department.

Not to be discounted are factors related to changes in the economic cycle and the increased trend toward industrial automation. Volitional mobility could be examined in relation to economic security. The worker in such a setting might be primarily concerned with movement, not focused upon desirability, but security and the anticipation that the jobs would not disappear with the advent of automated processes.
Many additional ideas present themselves as potential challenges to research. The area of research related to intra-plant movement appears a relevant and constitutes a fruitful area of sociological interest.
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APPENDIX
APPLICATION FOR EMPLOYMENT

Name__________________________

Last__________First__________Initial__________Date__________

Address______________________Number______Street______City______State______

Social Security No._____________Telephone No.________________________

(Own □ Neighbor □)

*Your Date of Birth: Month________________________Day___Year______

*Place of Birth________________________

Are You: Single □ Married □ Divorced □
Widowed □ Separated □

Name of Wife (Husband)________________________Birth Date______

First__________Maiden__________Marriage Date______

List Your Wife □ Other __________
Dependents: Husband □ Parents □ Children ________ and Ages ________

Have You Ever Worked No □
for this Company? Yes □

Date________________________Where________________________

Are Any of Your Relatives Employed Here? ________Who?________________________

Education (Circle Last Grade Completed): Grade School, 5 - 6 - 7 - 8;
High School, 1 - 2 - 3 - 4; College, 1 - 2 - 3 - 4

Willing to Work in Cold Temperatures? Yes □ No □
Willing to Work Night Shift Yes □ No □

Applicant Should Not Write Below This Line

Telephone Check:

Employer__________________________

School__________________________

Ratings: Attitudes 5 - 4 - 3 - 2 - 1
Work Habits 5 - 4 - 3 - 2 - 1

Physical Data

Height__________Weight__________

Other Information:

PAST EMPLOYMENT RECORD (Begin with Most Recent Employer)

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<th>Name of Company and Address</th>
<th>Type of Work</th>
<th>Period</th>
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<th>Supervisor and Department</th>
<th>Reason for Leaving</th>
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<td>Address</td>
<td></td>
<td>To</td>
<td></td>
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</table>

Driving Record: Do You Have a Driver's License? ______
Do You Have a Chauffeur's License? _____
Has Your License Ever Been Revoked? ______
For What Reason?

Have You Ever Had Trouble with the Police? ______ Explain: ______

Present Military Status: *Draft Classification______ If Reserve, which Branch?
Rank? ______
Past Military Service: None__ Yes, from No.____ Yr.______ to Mo.____
Branch_ ______
Rank When Discharged ______

Type of Discharge: Honorable______ Dishonorable______

The information given in this application is correct to the best of my knowledge and I understand my employment is dependent upon its verification.

Signature______
Employe's Service Record

Seniority Date ___________________ Con't. Service Date ___________________

Plant ____________________________

Name ____________________________

S. S. No. __________________________

Address __________________________

File No. ____________________________ Phone ____________________________

Are you a citizen of this country? Yes □ No □

Alien Reg. No. __________________________

Sex □ Single □ Married □ Widower □ Separated □ Divorced □

Height ____________________________ Weight ____________________________

Wife's Name __________________________

Given □ Maiden □

Wife's Date of Birth ____________________________ Marriage Date ____________________________

Children or Dependents ____________________________

E.B.A. Certf. No. ____________________________ Class ________ Group No. & Amt. __________

Own your home ________ rent ________ board? ________

Education in Yrs.—Grade School ________ High School ________ College ________

 Relatives With Company ____________________________

Service

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<th>Check No.</th>
<th>Dept.</th>
<th>Occupation</th>
<th>Rate</th>
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<th>Separated from Payroll</th>
<th>Key</th>
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</table>

KEY

X Strike Not Wkrg. E Employed D Discharged O Laid Off P Dropped Q Quit R Re-employed T Transferred S Rate Changed L Disciplinary Layoff

PO FORM C 3931 (Over)
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Personal Signature

Date of Birth
Place of Birth

Last Place of Employment

Last Place of Employment

Last Place of Employment

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Swift Training Programs:

Other Education: