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ABSTRACT

This report examines the effect of education on occupation, income, social mobility, and teaching as a profession in Iowa from 1870 to 1930. Particular attention is given to the impact of socioeconomic background upon scholastic achievement, length of schooling, and dropout rates. The Iowa state census manuscripts and the federal census provide the data for the study. Findings indicate that during the early 20th century Iowa lost ground, with respect to high educational attainment, to the more industrial states because rural education showed little improvement from the 19th century. Old-stock population with a Protestant religious background showed more interest in education than new immigrants with a Catholic or Lutheran religious background. Overall, household heads were less educated than their spouses due to a demand for women teachers. Family background was an important determinant of staying in school, while the children of farmers continued to drop out like their parents had done. For farmers, education made a minor contribution to intergenerational social and economic mobility, since increasing inheritance of wealth was the key determinant of economic status. In urban Iowa, education had a more positive effect on economic achievement. In conclusion, although modern channels of mobility through education existed throughout this period of transition, the traditional opportunities for mobility through property accumulation remained more attractive to the average Iowan. (Author/DE)

FINAL REPORT

Education and Social Structure: An Historical Study of Iowa, 1870-1930

National Institute of Education Project No. NE-G-00-3-0-0067

Richard J. Jensen and Mark Friedberger

The Newberry Library
Chicago, Illinois

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CHAPTER I

Introduction

The Study: Its Context and Objectives

Industrialization and urbanization, historians have long agreed, are the basic problems in American social history from the Civil War to the 1930s. Demographic trends, immigration, sex roles, ethno-cultural conflict, social mobility, economic inequality and class differentiation are subsidiary themes that, to a large degree, are interpreted in terms of industrialization and urbanization.[1] In this book we seek to illuminate all these topics by a case study of the social structure of Iowa in the early 20th century, with particular reference to the role of education and social mobility.

While we agree that cultural values are just as important as demographic facts in social history, we have not attempted a full scale analysis of value systems here.[2] We have used a version of the modern-traditional paradigm, finding that it provides a satisfactory interpretive model of the roles of ethnocultural groups, educational reform, economic change and social stratification. Scholars with a visceral objection to this approach are invited to consider our evidence.

A key "modern" value is emphasis on upward social mobility, coupled with complete trust in the efficacy of education in transforming individuals and society from tradition to modernity. Education is seen as the method by which individual talents can be identified, enhanced and applied to life's challenges, thus shifting the basis of status from ascribed (inherited) to achieved factors. Only recently have the social sciences developed data collection and analysis techniques capable of

dealing with the causes of stratification.

In a nutshell, industrialization refers to the modernization of the economy, with a shift out of agriculture into blue collar and white collar occupations. Urbanization is the geographical shift of people from farms to towns and cities. Demographic trends of greatest importance are the fertility patterns of occupational groups. Sex roles, especially the assignment of women to housewives and teachers, mean that male occupations must be of the central focus. With white collar jobs producing far more status and income than blue collar jobs, the class differentiation of urban society is intimately linked to economic inequality. For analytic purposes, we will classify families whose head is employed in a white collar job as middle class, in a blue collar job as working class. True, this obscures important psychological identifications and attitudes, but a quite different research strategy is required to handle such problems. Immigration and ethno-cultural differences will be treated in terms of observed place of birth and announced religious preference of individuals; we will not attempt to analyze the collective value system of ethnocultural groups in this book.

Very little historical research has appeared that makes use of these approaches to gauge the importance of education in the process of industrialization and urbanization.[4] The reasons are simple. Even for sociologists, and economists the problem of securing suitable data--material which measures key events in the life cycle--is both expensive and time consuming to collect. For historians these complications are compounded because such data is virtually non-existent before 1940--and then it is only in published form or found in widely scattered school system or college archives. Fortunately two midwestern states, Iowa and South Dakota, did collect educational attainment data in the early 20th century

in their state sponsored censuses, and this data was preserved.

This study will use the Iowa materials for two basic purposes. The first will be to rigorously measure the effect of education on individual lives in the years before mass secondary and college education was the norm. Here the emphasis will not be on the specific content of the individual educational experience--the changing curriculum, the relationship between teachers and students, and the daily activities within the school itself-but rather with the amount and type of schooling and its influence on career contingencies, particularly occupation, income, and age. At the same time we are interested in exploring the impact of what sociologists call socio-economic background--religion, ethnicity, and class--upon scholastic achievement, length of schooling, and conversely upon drop-out rates. Although the nature of the material made it impossible to deal, except inferentially, with the cultural impact of education, it was possible to gauge its effect upon the social structure of Iowa. Special attention will be paid to its influence on social and geographic mobility, and in addition on the life and work of the teaching profession. The second objective stems naturally from the first, but will rest on less systematic evidence. It will attempt to understand why schooling was given little priority in an agricultural society, which for its time was modern and affluent, when education provided the "cultural bridge" for rural youth who could not find opportunities on the land.

Related Research

In the literature there are several approaches which analyze education and its relationship to society. The first, the economist's view, is built on the simple premise that the richest, fastest growing societies

invest heavily in education, and that people who are the most successful and socially mobile are those with the most education. On the one hand scholars have concentrated on measuring aggregate investments in education, and educational systems. They have attempted to calculate overall costs, and the income foregone by the total population in completing schooling. Fishlow, for example, has taken historical data from states and regions and compared levels of investment in education; and Denison has boldly attributed 20th century US growth to investment in education and technology. On the other hand, and more pertinent here, economists have undertaken individual human capital analysis. Schultz and Becker, to mention the most well known, have used 1940 US census data on education and income to show how much extra years of schooling cost, how much they were worth in increased life time earnings, and what the financial rate of return was.[5]

In an agricultural society, and especially one with a relatively traditional population in which an important minority were of first or second generation immigrant origins, where success on the farm was synonymous with long hours of drudgery, it was not surprising that ambitions were set at accumulating "material capital" (farm machinery, farm buildings, animals, and land) as opposed to investing assets in "human capital" (the education of children, and new vocational skills for the farmers themselves). However, during a period when the perceptions about education were changing, it is important to partly replicate the Schultz and Becker approach and calculate earnings forgone by high school and college students, and the eventual returns post-primary education brought the minority who stayed in school. As levels of educational attainment in Iowa were modest, it was fortunate that we were able to distinguish between those who received their education in

rural one-room schools, and those who attended graded primary schools.[6]

Just as it is vital to measure how economically rewarding education was to an individual in the early twentieth century, so it is of interest to find out which groups were concerned with obtaining an education, and which were not. As Inkeles and his colleagues have suggested, education is one of the most important ingredients to the make up of the "modern" individual. Inkeles sees modernity as an active future orientated psychological attitude, with education enhancing the desire for achievement by providing tools such as reading, writing, arithmetic, the systematic analysis of problems, and the appeal to scientific authority. In contrast, in the opposite camp, traditionalism is conceived as family rather than career orientated, fatalistic, and passive.[7] In Iowa, even in the 19th century, no stark polarization existed, though a spectrum of modern to traditional values, behaviors and aspirations can be identified. Ethno-religious groups, for example, can be roughly classified: On the modern side were the Yankee-British-Scandinavian pietists, versus, on the traditional, Continental ethnic groups, but especially Catholics and German Lutherans. Our hypothesis suggests the Yankees and other pietists were more interested in forward looking behavior with education as a major vehicle for mobility, with the Continentals, the traditionalists, exceedingly ambivalent towards education and its potential. With no other indicators of a psychological value system available, we shall use religious affiliation material as a proxy. In which case emphasis will be placed upon the "modern" pietistic concern with fulfilling individual potential, in contrast to the traditionalistic liturgical insistence that group or family affairs were more important than individual accomplishment.[8]

Political interpretations about the role of education are also important to this study, for schooling has remained a controversial local political concern in all types of environments. As a symbolic cultural issue, especially when it concerned English language schooling, educational reform caused considerable conflict in several midwest states, particularly Illinois and Wisconsin. In Iowa, this issue was more muted, though ethno-cultural battles did rage over the liquor question in the last half of the 19th century.[9] More important in Iowa was the issue of the local control of school systems. This matter dovetails nicely into the major historiographical debate over the reform of public education in the United States. The classic theme in the history of education was that the public school system was a microcosm of democracy at work. The theme postulates that working men and yeoman farmers demanded education to raise themselves up, that they retained a vital interest in, and control of, their local systems, and relied on them to channel the aspirations of generations of youth towards upward social mobility.[10]

Recent revisionist interpretations attempt to stand this on its head. Katz, Tyack, and Cremin, for instance, see compulsory public schools as engines of social control, but they agree on little else. Cremin attempted to show that aggressive reformers sought to modernize society, and uplift farmers and immigrants.[11] Katz offered an alternative explanation in which the middle classes sought to make the working classes docile, prevent their upward rise, and make them accept their low status by proving to them that they did not have the capability to do better. Thereby, this radical interpretation suggests, the working classes were made pliable fodder for low skilled blue collar jobs, and programs of vocational education were designed to channel their energies

into making profits for the capitalist elite. Finally, another revisionist variation concerned the seizure of control of power in school systems by bureaucrats and teachers in the name of efficiency and expertise. The objective was to suppress local control, especially by consolidating country school districts.[13] While this study will not attempt to resolve the conflicting interpretations, it can contribute by taking a closer look at the issue of local control, and by providing empirical estimates of how important schooling in fact was in determining life chances.

In a society undergoing the transformation from essentially a semi-subsistence frontier economy to one on the threshold of mechanized and sophisticated agriculture, education was perceived in a rather different light than was the case in an urban society. Farm children were important as a source of labor, and the influence of farmers was powerful enough to ensure that school terms and vacation periods did not intrude upon periods of planting and harvesting. Provided farmers remained in positions of authority on school boards, they could ensure that public education never became a financial burden, and that the local school avoided transmitting aspirations which were damaging to farming as a way of life. As in all agricultural societies rural people in Iowa were somewhat distrustful of post-primary education. An academic curriculum in secondary school, it was believed, tended to draw a student's orientation away from the land and make a child too eager to run off to the city. An important portion of this study, therefore, will be devoted to assessing the role of education and its effect on mobility in a rural environment which was uneasy about the effects of over-education.

Just as there was debate over change in public education in the last 100 years, so there is disagreement in the ranks of sociologists over the importance of education in the mobility process. The work of

W. Lloyd Warner and his associates attempted to show that schools and education played a minor role in generating mobility.[14] This theme was revived by other scholars until it was exhaustively explored by Coleman, and then by Jencks, who especially took a wholly negative view of the part education played in making society more equal.[15] Jencks had benefited from the work of Blau and Duncan, who in their path breaking American Occupational Structure[16] had revolutionized the study of social mobility. For not only were the two authors concerned with rigorously examining intergenerational mobility from the experience of a large national sample, they went considerably further. They developed a model which was built on the premise that background and life cycle experiences determined, to a certain extent, socioeconomic status. In short, with the use of multivariate statistical analysis they designed a causal model to explain the influence of ascribed status upon education, and in turn of schooling upon occupation.[17] In contrast to Blau and Duncan, who assigned a key role to education in the measurement of upward social mobility, Jencks, in his wide ranging Inequality was less sanguine either about the role of education, or the "openness" of American society. He found that although background had some effect on educational chances, education itself had only a slight influence on income.[18] As both Jencks and Duncan employed the same data, and offered different interpretations about the effect background and intervening variables had on social status, the availability of historical data from a largely rural population should provide an alternative perspective.

Since the appearance of the American Occupational Structure an enormous amount of research has been conducted which employed the basic model of father's occupation and education, number of siblings, respondents' education, and occupation, to predict status. Recently much emphasis

has been placed on panel studies which followed specific age cohorts throughout their life cycles, rather than using cross sectional data obtained at one point in time and a synthetic cohort design.[19] Lack of sophisticated measures of background variables, particularly of individual aspirations and intelligence quotients, has made exact replication impossible with our more limited historical material. However, the original Duncan formulation of the model, and a later revision of it, were the foundations on which the multivariate model in this study was based.[20]

Three problems: sample attrition, the dominance of men with rural backgrounds, and measurement difficulties, prevented a wholly satisfactory replication. As will be shown, the physical mobility of the Iowa population and some inadequacies in the records, prevented the "recapture" of a large number of sample members. At the same time, inter-generational occupational analysis with first generation city dwellers whose fathers were farmers tended to blur results. But the most troublesome flaw in our procedures, the lack of satisfactory occupational scores for each specific occupational category, forced a substitution of empirically derived generic scores for occupational groupings.

More successful was our attempt to contribute to the central theme of industrialization in the history of American social mobility.[21] That is the movement of blue collar workers to white collar positions and vice-versa, and perhaps more important, the movement of men from farm to non-farm occupations. This latter phenomenon has been virtually ignored by historians of urbanization, although the cross national research on industrialization and change in social structure by Lipset and Bendix and more recently by Hazelrigg, offered a comparative dimension with which to judge the same process in Iowa.[22]

In previous historical studies which have investigated social mobility, the standard method has involved the linkage of information for individuals in the same city or county at two points in time, either intra-or inter-generationally. Linkages have often proved so difficult that few parameters except race and ethnicity have been used by historians in comparing data on social mobility.[23] In this study with controls such as education, and religion added to the analysis, and the capability of tracing the backgrounds of individuals beyond county boundaries to anywhere within Iowa, we can not only add to the understanding of social mobility, but of geographical mobility also.

Increasingly after 1900 the drift of rural people to the cities attracted scholarly attention, and researchers were especially concerned with the educational preparation these cityward migrants received before they started to work in the cities. In Iowa a large surplus of farm children tended to limit opportunities, and forced children to look elsewhere for careers. It was obvious by 1890 that most would have to leave the land. Thus there was great potential for emphasis on schooling to prepare youth for the move from rural areas to urban. Or to put this in economic terms, for rural people to place less emphasis on the accumulation of land as their greatest resource, and more on the education of their children as an investment for the future.

Of course, large numbers of farmers did not leave their familiar environments and therefore there is a need to come to some understanding of open country social structure in a period of lowering expectations for farmers. As the important studies by Curti, Bogue, and Cogswell on Wisconsin, Illinois and Iowa have suggested, cornbelt social structure was exceedingly fluid before 1880, and the ascent of the "agricultural ladder" was a common experience for most farmers.[24] However, work done

by rural economists, and sociologists around the end of World War I indicated that the cornbelt no longer had its early fluidity, and that inheritance rather than the traditional slow movement up the ladder, was the key to farm tenure and mobility.[25]

Finally, without a teaching profession of reasonable competence, the education of the children of a society would have little utilitarian value. There is no point in discussing the role of education without spending some time on the position of teachers. Willard Waller's classic study of the teaching profession in the period paints a somewhat dismal picture and suggests that the low status of school teachers was largely attributable to poor financial rewards, the lack of congruence between teaching and the material culture of America, and the poor image teachers possessed.[26] While Waller also concentrated his attention on the small town environment, there is a need for an historical perspective on the social structure of the teaching profession, and whether the negative legacy of contemporary research was in fact legitimate. We will show that Iowa supported a "dual school system," one modern, and one traditional, with quite different teachers, procedures, content and control.

The Organization of the Study

After a preliminary chapter which describes Iowa in the first two decades of this century, and the materials used in the study, we shall investigate the extent of educational attainment in 1925. Initially emphasis will be placed on the type of school Iowans attended (rural primary, graded primary, and secondary) and we will compare place of residence, occupation, religion, ethnicity, and income, with type of education. The second part of Chapter III will concentrate more on

those who attended high school or college with the object of calculating the rate of return for secondary and college education, and the amount of earnings foregone by those who stayed in school after the 8th grade. A third section will look at the part ethnicity and religion played in determining educational attainment, and finally trends in the education of the spouse and children of each head of household, will be examined.

Chapters IV and V deal with the dynamic aspects of the study: the effects of background upon education, and in turn education on socioeconomic status. However, the first priority in Chapter IV will be to show the impact of industrialization on Iowa's occupational structure over a generation. We shall use multivariate and counterfactual techniques to measure the effect of father's status on education and mobility, and also ethno-religion on social mobility. Only a limited amount of time will be taken up with an analysis of intra-generational patterns, because the research design restricted opportunities to measure trends in individual careers. The chapter will conclude with a discussion of farm mobility, and the participation of farm youth in college enrollment in the early 20th century.

In Chapter V multivariate techniques will utilize the Blau and Duncan model to measure the relationships between a man's father's occupation, his number of siblings, education, ethnicity, religion, occupation, and his income in 1915. Similarly the farm population will also be subjected to multivariate analysis to understand inter-generational economic trends in the open country. The final part of the chapter is concerned with further analysis of the relationship between education and income, and occupation and income. Chapter VI concentrates on the patterns of geographical movement around the state, but especially the key issues of urbanization, rural-urban migration and the performance of

rural youth in towns and cities. And the final chapter is devoted to an analysis of the social structure of the teaching profession, and their immediate superiors the school boards in various types of Iowa communities.

Notes - Chapter I

1. Race relations is perhaps the most important topic in social history that does not depend chiefly upon industrialization and urbanization.

2. Richard Jensen, Illinois (New York: Norton, 1976) does make this sort of heroic effort for a neighboring state.

3. Neil J. Smelser and Seymour Martin Lipset, eds., Social Structure and Mobility in Economic Development (Chicago: Aldine, 1966), p. 29. Otis Dudley Duncan and L.W. Hodge, "Education and Occupational Mobility," American Journal of Sociology, 61 (1963), pp. 629-644; James Coleman, Equality of Educational Opportunity (Washington, D.C.: Government Printing Office, 1966); Christopher Jencks, et al. Inequality: A Reassessment of Familiy and Schooling in America (New York: Basic Books, 1972); Samuel Bowles, "Schooling and Inequality from Generation to Generation," Journal of Political Economy, 80 (1972) pp. 219-251; William H. Sewell and Robert M. Hauser, Education, Occupation and Earnings: Earnings in the Early Career (New York: Seminar Press, 1975).

4. Exceptions are Stephen Thernstrom, The Other Bostonians (Cambridge: Harvard U.P., 1973); Josef Barton, Peasants and Strangers: Italians, Roumanians, and Slovaks in an American City (Cambridge, Mass.: Harvard University Press, 1975), pp. 117-146; compare Michael Katz and Paul Mattingly, eds., Education and Social Change: Themes from Ontario's Past (New York: New York University Press, 1975).

5. Albert Fishlow, "Levels of Nineteenth Century Investment in Education," Journal of Economic History, 26 (1966), pp. 418-436; Edward F. Denison, "Education, Economic Growth, and the Gaps in Information," The Journal of Political Economy, 70(1972), pp. 124-128, Denison attributes about 23% of the growth rate between 1929-57 to education. Theodore W. Schultz, The Economic Value of Education (New York: Columbia University Press, 1963), p. 45, and his Investment in HumanHGapital (New York: The Free Press, 1971), pp. 78-132; Gary S. Becker, Human Capital (New York: National Bureau of Economic Research, 1975).

6. While years of education have often been criticized as an inadequate measure of educational credentials, as we are dealing with one state there will be less variance in the type of education men and women received, and the question of the "quality" of education should be less troublesome.

7. Alex Inkeles and David H. Smith, Becoming Modern (Cambridge, Mass.: Harvard University Press, 1974), pp. 23-32.

8. See Richard Jensen, The Winning of the Midwest (Chicago: University of Chicago Press, 1971), pp. 64-65, 86, for a discussion of the division of religious denominations into pietistic and liturgical groups, and their world view. The pietistic-liturgical division is broadened to a more general modernizer-traditionalist interpretation in Jensen, Illinois. Iowa, lacking Chicago's slums and the heritage of subsistence agriculture of southern Illinois, provides a more truncated society than her neighbor state. The more traditional

elements in Iowa would fall in the middle of Illinois spectrum, and would have appeared strikingly modern in, say, Arkansas.

9. Jensen, The Winning of the Midwest, chapters 4 and 5.

10. George S. Counts, The Selective Character of American Secondary Education (Chicago: The University of Chicago Press, 1922).

11. Lawrence Cremin, The Transformation of the School (New York: Knopf, 1961).

12. Michael B. Katz, The Irony of Early School Reform: Educational Innovation in Mid 19th Century Massachusetts (Cambridge, Mass: Harvard University Press, 1968).

13. See David B. Tyack, The One Best System (Cambridge, Mass.: Harvard University Press, 1974), passim, and especially for rural rationalization of school systems, pp. 21-27. In Iowa there is considerable evidence that local control or what Katz calls, "democratic localism," [Class Bureaucracy and Schools (New York, Praeger, 1975), p. 15] was institutionalized in Iowa as the following from an annual report of the State Superintendent of Public Instruction indicates. "New York has a highly centralized state system. While in California, all tax levies are uniform and local schools are supported entirely by the general taxes of the state. Monarchial school organizations may secure efficiency, standardization and reforms in the educational system with great ease but there is always a danger of their crystallizing the educational system, destroying the initiative of

local communities, and rendering them incapable of progress. The Iowa plan of standardizing schools is the very essence of democracy for it is voluntary and prescribes only minimum requirements, leaving each community free to develop naturally, working out its own problems in harmony with its environment." Report of the Iowa Superintendent of Public Instruction 1911 (Des Moines: State of Iowa, 1912), p. xvii.

14. W. Lloyd Warner, Democracy in Jonesville (New York: Harper, 1949); and August B. Hollingshead, Elmtown's Youth (New York: John Wiley and Sons, 1949).

15. C. Arnold Anderson, "A Skeptical Note on the Relation of Vertical Mobility to Education," American Journal of Sociology, 66(1961), pp. 560-570; Coleman Equality of Educational Opportunity, passim; Jencks, Inequality.

16. Peter Blau and Otis Dudley Duncan, The American Occupational Structure (New York: John Wiley and Sons, 1967).

17. Ibid, Chapter 5.

18. Jencks, Inequality, p. 227.

19. Aage B. Sorenson, "A Model for Occupational Success," American Journal of Sociology, 80 (1974), 44-57; Karl Alexander, and Bruce K. Ecland, "The Effect of Education on the Social Mobility of High School Sophomores 15 Years later." Final Report ERIC Ed.087-207.

20. Otis Dudley Duncan, David Featherman, and Beverley Duncan, Socio-economic Background and Achievement (New York: Seminar Press, 1972).

21. Stephen Thernstrom, The Other Bostonians (Cambridge, Mass: Harvard University Press, 1973); Lawrence Hazelrigg, "Occupational Mobility in 19th Century US Cities: A Review of the Evidence," Social Forces, 53 (1974), pp. 23-25.

22. Seymour Martin Lipset and Reinhard Bendix, Social Mobility in Industrial Society (Berkeley: University of California Press, 1959); Lawrence Hazelrigg, "Cross-National Comparisons of Father-to-Son Occupational Mobility," in Joseph Lopreato and Lionel S. Lewis, eds., Social Stratification: A Reader (New York: Harper, 1974). 469-493.

23. See Thernstrom, The Other Bostonians, pp. 265-288.

24. Merle Curti, The Making of an American Community (Palo Alto: Stanford University Press, 1959); Alan G. Bogue, From Prairie To Cornbelt (Chicago: University of Chicago Press, 1963); Seddie Cogswell, "Tenure, Nativity, and Age as a Factor in Iowa Agriculture, 1850-1880," Unpublished Ph.d dissertation, University of Iowa, 1973.

25. W. J. Spillman, "The Agricultural Ladder," American Economic Review, Supplement, 9(1919), pp. 170-179.

26. Willard Waller, The Sociology of Teaching (New York: John Wiley and Sons, 1932).

CHAPTER II

The Setting, the Data and the Research Design

The Economic Structure of Iowa

The one characteristic which made Iowa unique, the fertility of her soil, coupled with a fine railroad network, insured that from the late 1880's commercial agriculture dominated the state's economic structure.[1] Such industry as there was in Iowa was almost entirely based on food processing, with the meat packing plants in Sioux City, Ottumwa, and Waterloo, and the breakfast cereal factories in Cedar Rapids as examples. One exception to this pattern was the railroad industry which hauled away the state's products, and brought in manufactured goods.[2] Railroads could be considered a sub-economy in the state, for no less than four major trunk lines crossed Iowa from east to west. Several Iowa cities had important railroad shops on these lines and a substantial population of railroad workers lived in some urban areas. The railroads also helped support a modest coal mining industry in the southern half of the state. Therefore, with very few other exceptions Iowa's economy depended upon agricultural prosperity and the see-saws in the price of corn, hogs, cattle, and dairy products.

The 1890's can be shown to be a watershed in Iowa's history and economy. Farmers had largely completed the transition from subsistence to commercial farming, and scientific methods of production, transportation, and marketing were being emphasized by the college of agriculture and experimental station at Ames, and by the farm editors and community leaders.[3] Between 1900 and 1920, there was further rapid modernization in all aspects of agriculture as farmers organized into trade associations, established cooperatives, introduced scientific breeding, management and

animal disease control, and assisted in the first experiments in bio-engineering which in the 1930's and 1940's would transform corn production. In 1912 the first agricultural agents were appointed in Iowa. At roughly the same time, some Iowa counties began courses in agriculture in rural high schools, and there was growing support for 4H activities.[4] In short, a certain proportion of the Iowa farm population was very modern-minded by the 1920's. They were ready for a form of agri-business, although their ethos was still very clearly directed towards the family farm.

But no discussion of the Iowa economic structure is complete without mention of agricultural prosperity cycles in the first three decades of this century. For, from 1897 until 1919, the corn belt was exceedingly prosperous, with farm income and most importantly, land values, rising steeply. This inflationary spiral in land prices reached its climax in 1920 when severe deflation caused havoc in the ranks of farmers who had speculated in real estate. Neither farm income nor real estate soon regained the kinds of levels it had attained in 1920, but in comparison to the first years of the 1930's, the Iowa economy remained reasonably prosperous. Indeed, farm incomes continued to rise from their low levels of 1921, and by 1929 were 78% higher than they were at their 1921 level.[5] Although it is extremely difficult to identify from any material that is available the strain placed on rural people by these inflationary and deflationary spirals, probably these trends turned the mood and spirit of the people more towards political action or fatalism, and in turn perhaps caused a softening in the modern orientation towards ambition and achievement.[6] Certainly one of the major legacies of the agricultural deflation of the 1920's as far as this study is concerned, was the almost total abandonment of the reform of rural education until the late

1930's.[7] With economic stringency essential, the Iowa response was somewhat characteristic: the state insured that she was near the very top in expenditures on paved roads in the 1920's but retained more one-room schoolhouses than any other state in the union.[8] Thus, Iowa met the impact of economic difficulties with a short-term solution that cut local transportation costs, rather than continuing to improve educational facilities, which might have been a long-term solution to the plight of farm children.

The Ethno-Cultural Structure of Iowa's Population

Unlike the eastern midwestern states, such as Ohio, Illinois, and her southern neighbor, Missouri, Iowa's population was comparatively heterogeneous. However, like northern and central Illinois, the southern half of Iowa was dominated by an old stock population which had moved in the classic nineteenth century migration stream from New England, Pennsylvania, and New York, via the old Northwest. To be sure, a minority of the southern Iowa population did have border state antecedents, and had moved to Iowa by way of Missouri. As Tables 2.1 thru 2.3 show, Iowa had a substantial German population, of which the majority were Protestant with large pockets of German Catholics. In the river counties along the Mississippi, many townships were composed almost entirely of Germans, though only one county, Dubuque, had a majority of German Catholics in its population. Out on the central and northern prairies, several other counties were dominated by a German farm population, the most noticeable being Carroll, a predominantly German-Catholic county in west central Iowa. In comparison to Wisconsin and Minnesota, Iowa's Scandinavians were scattered to a degree which made their influence limited except in a handful of communities. In Winneshieck and Winnebago, the Norwegians

were the most dominant ethnic group; in Audubon, the Danes outnumbered the old stock and German population; and in Hamilton and Webster the Swedes were also more numerous. Even so, in the majority of counties in the northern half of Iowa, the Scandinavian rural population was interspersed with other groups. Apart from two centers of Dutch influence, these patterns of ethnic heterogeneity were duplicated elsewhere.

In the cities and towns of Iowa, the only centers of ethnic concentration were found in the Mississippi river cities of Dubuque (German Catholic), and Davenport (Agnostic Germans). In Des Moines after 1900 there was a small Italian enclave on the south side of the city; and Czechs (Bohemians) lived in substantial numbers in Cedar Rapids. Otherwise, apart from the scattered small towns and trading centers which were located in the ethnic areas already mentioned, ethnic domination elsewhere was minimal. Iowa had a tiny black population, which for the most part performed service occupations in the larger cities, or worked in the rural mining camps in the southern parts of the state.

Economic Areas and Rural Urban Relationships

By the turn of the century, the rural part of Iowa could be safely divided into five economic sub-regions according to the type of agriculture carried out in these areas.[9] The two southern tiers of counties were topographically and economically, very similar to those in northern Missouri. Farming on the poorer soil in this area was generally a mixture of subsistence and commercial enterprise with a considerable amount of land given to pasture. The Mississippi River counties from Clinton southwards, and the whole of the central part of the state can be classified as part of the classic cornbelt, where corn-hog farming was predominant. The northeastern counties, with uncharacteristically

Table 2.1

Ethnicity and Occupational Distribution

	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm Renter	Lab	Retd	%	N
Old Stock	4	3	9	5	8	11	14	19	24	4	1	53.2	2073
British	3	4	9	4	8	9	13	18	29	2	1	5.9	229
Irish	3	3	9	6	6	11	11	20	24	2	0	7.8	303
Scandi-navian	2	4	7	5	11	13	12	18	26	2	1	8.2	321
German	3	2	8	5	8	8	6	28	29	4	1	20.7	807
N. Europe	4	3	3	0	13	14	18	12	28	4	3	2.0	78
East, South Europe	1	0	13	1	8	15	28	18	11	2	2	2.1	83
Totals	3.1	2.5	8.4	4.5	8.0	10.6	12.5	20.9	25.3	3.3	0.9	100%	3894

Table 2.2

Ethnicity and Educational Attainment

	0	Rural 1-4	Rural 5-8	Graded 1-4	Graded 5-8	Some H-S	H-S	Some Coll	Coll	%	N
Old Stock	4	10	28	2	29	10	9	7	3	53	2190
British	3	10	31	1	32	6	7	8	3	5	243
Irish	2	12	25	2	35	6	6	7	3	8	336
Scand.	1	11	32	2	39	6	5	4	1	8	339
German	1	12	31	3	37	6	5	4	3	20	852
North Europe	2	16	29	5	30	5	1	7	1	2	83
East, South Europe	6	22	19	5	38	6	6	0	1	2	88
Totals	2.7%	10.9	28.6	2.1	32.1	8.1	7.0	5.9	2.6	100	4131

Note: Ethnicity: North Europe = Dutch, Belgian, East, South Europe = Italians, Poles, Greeks, Hungarians, Bohemians, Russians.

Table 2.3

Religion and Occupation
Heads of Household, 1925

	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm Renter	Lab	Retd	%	N
None	1%	1	7	3	6	8	17	22	28	6	1	24	943
Prot Unsp	3	3	13	7	15	22	3	8	12	2	1	16	641
HS Prot	12	9	15	8	6	9	7	16	18	2	0	7	252
LS Prot	4	2	6	4	7	8	11	23	31	3	1	26	994
Lutheran	2	3	7	4	7	8	9	26	32	3	1	12	461
Catholic	2	2	9	5	6	10	12	27	25	2	1	15	591
Jewish	0	8	42	8	8	8	17	0	8	0	0	1	12
N	3.1	2.5	8.4	4.5	8.0	10.6	12.5	20.9	25.3	3.3	0.9	100	3894

Note: Religion: High Status Protestant = Presbyterian, Congregationalist, Episcopalian, Christian Scientist, Quaker.
Low Status Protestant = Methodist, Baptist, Christian, United Brethren, Latter Day Saints, and Evangelical Sects.

hilly terrain, were similar to their counterparts on the Wisconsin side of the Mississippi. Here dairying was the chief commercial venture. The northern tiers of counties bore a strong resemblance to their Minnesota neighbors. This was a cash grain region, with larger farms, flat terrain, and very rich soil. Finally, the whole of the western third of the state, which had similar economic and topographic features as eastern Nebraska, and southern South Dakota, was largely a cash grain and cattle producing area. The population here was more dispersed, there were no towns of any size, and especially in the far northwest, farming was more prosperous than elsewhere.[10]

As might be expected in a state dedicated to commercial agriculture, the towns and cities had a special relationship with their rural hinterlands. The small towns and trading centers were essentially service points and retirement centers for the surrounding rural areas, and even larger cities performed similar functions in a more comprehensive fashion. For this reason the integration of the economy around agriculture, and the familial contact brought about by kin dwelling in town and country, tended to lessen the chances of significant rural-urban antagonism, at least over economic matters. All the urbanites knew that, to some extent, they depended upon agriculture for their livelihood.

The Educational Environment

The most pressing problem which faced the educational system in Iowa from the late nineteenth century until after World War II, concerned the delivery of a satisfactory education to its rural children. In 1925, roughly 40% of our main sample of heads of households had had no formal education other than a somewhat casual attendance at a local one-room schoolhouse. It was not until 1902, that the state legislature

passed a compulsory education law which made attendance obligatory for all children between the ages of seven and fourteen.[11] This apparent indifference did not indicate that Iowans in general were hostile to education for their children. In a limited way they provided adequately, however, the emphasis remained on the one room rather than the consolidated rural school.[12] Farmers especially took a skeptical, but essentially practical attitude, towards academic achievement as a dubious ingredient for success in life. Hamlin Garland's aphorism that "Barns were built first, houses next, and schoolhouses last of all," was a reasonable enough observation for the majority of Iowa rural communities. Furthermore, by postponing a compulsory attendance law Iowa escaped the ethno-cultural school battles that raged in Wisconsin and Illinois in the 1890's.[13]

As Baldwin suggested in his classic study of Iowa farm children, "parents urged upon their children a limited amount of education as the necessary equipment to secure a living, but on the whole an extensive education was discouraged as surplus from which no returns could be expected."[14] Indeed, Baldwin's typology of farm communities which on the one hand showed the "Cedar Creeker" to stress a spiritual attitud to life, had a profound respect for education, and taught his children to invest in enduring values; and on the other hand the "Homelander" who was a materialist who accepted educational conditions as they were, was useful for separating the rural Iowa population into analyzable groups.[15] Of course there were other legitimate reasons why educational reform was delayed in the twentieth century. Transportation difficulties and rural urban antagonism over a fair tax burden for supporting schools were typical areas of contention.

Certainly the economic issue was of paramount importance, for it was apparent that the movement for rural school consolidation burgeoned

only when the farm economy was strong. It was realized as early as the 1870's in Iowa that the consolidation of one-room schoolhouses was the solution to the inefficient and wasteful arrangement of having a school in every section of every township. But it was not until twenty years later that the first consolidation in fact took place. The golden years of agriculture produced an irresistable movement for consolidation, and after 1913, when the state legislature voted funds for vocational courses in the schools, some activity took place. By 1914, sixty school districts were consolidated in rural Iowa, 187 by 1916, and 439 by 1921.[16] However, the agricultural slump which hit in the early 1920's forced further consolidation to be delayed. Although the state legislature passed a standardization bill for rural schools in 1924, which allotted funds to school districts provided certain minimum standards were met, rural consolidation virtually ceased until the cornbelt economy revived in the late 1930's.

By 1925 most Iowans lived in villages, towns and cities. Their school problems were also a product of staunch localism. After the first decade of the twentieth century, almost every village in the state had at least a two-year, if not a four-year high school program. As was the case with rural schools, this expensive duplication was bound to lower standards. The very small high school usually had less than half a dozen teachers who each taught several subjects, and it graduated only about ten students a year. However, by the 1920's, most village and small town high schools had already emerged as the local meeting place and focal point of every community,s pride, as the school's athletic and debate teams battled nearby rivals year in and year out. Although their academic training left something to be desired, few would deny that the contribution to the psychic well-being of the community as a whole

was worth the taxpayers' money.[17] In the larger cities in Iowa the school problem focused on the reluctance of working class youth, especially employable boys, to stay on the "academic escalator" to middle-class status. As in most industrial cities in the country, an effort was made to promote vocational education in Iowa's urban schools. A study which was made in a single Iowa city, but was probably typical of patterns elsewhere, showed that over half of the male students did not enter high school, and as many as three quarters of the seventh graders never finished elementary school. Lack of interest in the middle class academic curriculum, more than lack of financial resources, was the most common reason for this dropout syndrome.[18] For this reason progressive educators turned to vocational subjects as a substitute for the more academic approach even in grade school to hold their students' interest.

But only the younger members of the present study could have taken advantage of these modest twentieth century opportunities. The vast majority quit school at fourteen, or before, with the basic requirements of reading and writing, and figuring taken care of. Their lifelong remembrance of their educational experience consisted of trudging back and forth to the one room school house in a blizzard; of a constant stream of adolescent girls masquerading as teachers who often failed to stay in the school more than a single term; or of play in the schoolyard in between interminable self-study periods or sessions of tedious recitation. Perhaps a drafty wooden box at the edge of a bleak prairie was no worse a place to go to school than some red brick Victorian monstrosity in an industrial city. But at least in the urban environment the grading system permitted children to spend most of the school day in the company of children of their own age. In the country school, the common pattern was for children of all ages to be in the same room, and to vie for the

teacher's attention. Although cases of teachers being physically attacked by older and larger pupils were mercifully rare, the burden placed upon a very young and totally inexperienced female was such that much of her time was spent in keeping order rather than in attempting to teach. To a certain extent the daily stint at school was something of a relief period for the rural children. From an early age, according to Baldwin, farm children were invariably instilled with a "priority of home responsibilities," that is, hard, unpaid work which to most city children would have seemed unjust.[19] There was a marked difference between the attitudes of urban and rural parents, and the direction of their childrens' lives. Whereas the majority of children in the city had a considerable say in what they did in their out of school hours, and even when they quit school to go to work, rural children rarely had this freedom. Their parents could not "get away from the idea that children were brought into the world for the benefit of parents."[20]

Two statistics, one more often quoted than the other, went a long way to making Iowa somewhat more complacent about the state of education than was warranted. The first concerned the low literacy rate in Iowa, and the fact that the state had fewer illiterates within her borders than any other. For a moment's reflection, this obviously did not bestow any great credit on the educational system, rather, it was caused by the predominance of an old stock and northwest European population in the late nineteenth century. The second statistic showed that in the closing decades of the nineteenth century and in the first years of the twentieth, Iowa ranked in the first half dozen states in the nation in the number of college educated men and women it produced.[21] Although at first this seems an impressive record, particularly for an agricultural state, it should be remembered that the college training received by

the majority was marginal. Of the almost twenty five institutions granting degrees at this time, only about half a dozen could seriously be considered places of advanced educational work, and only the three state-supported universities had large enough faculties to give well rounded college programs. Overall, then, the Iowa educational system was a patchy, somewhat dislocated affair. There were some noteworthy exceptions, but in general educators were attempting to improve standards so that children could successfully compete with modern skills in the world of the 20th century.[22]

The Data

The basic materials for this study were drawn from the individual returns of the Iowa state census manuscripts of 1925.[23] One other state census, that of 1915, which was alphabetized by county, was also utilized for supplementary data on individual sample members. The bulk of the intergenerational variables (father's occupation, wealth, place of residence, and respondent's number of siblings) were gathered from the Federal census manuscripts of population and agriculture of 1880, and the 1900 Federal population census manuscripts. The Soundex Indexes of those years were first consulted in order to locate the place of residence of individuals inside and outside Iowa.[24] Information was also gathered from city and educational directories where they were available; and individual tax assessment returns in local courthouses for the majority of rural sampling areas were also consulted for the year 1925.

Research Design

Rather than taking a simple random sample of all heads of household in the state from the 1925 census, a two stage stratified method of

community random sampling was adopted. This procedure was followed to permit tracing and examination of local records without having to search every one of the 99 courthouses in the state. Initially the state was divided into five population groupings according to density: open country areas, villages below 1,000 in population, trading centers between 1,000 and 2,000, towns between 2,000 and 16,000, and cities over 16,000 people in size. These divisions were not arbitrary, but rather followed the breakdown of population given in the published 1925 state census, and thus are one of the few pointers available for checking sampling error.[25]

The rural areas of the state were then divided into economic divisions, and township sampling units were then picked randomly from each economic area to reflect the open country population of the economic areas in 1925.[25] There was one exception to this, however. Six widely dispersed townships were studied by rural sociologists between 1913 and 1939 and it was decided to incorporate these six townships into the study because their earlier work was valuable as a base.[27] By chance, another early rural sociology survey was also uncovered, coincidentally in a township which was already randomly picked.[28] In all, twenty five rural townships were used in the study in order to represent the forty-two percent of the Iowa population living on farms in 1925. One other compromise needed to be made in the sampling procedure for reasons of economy. Any village below 1,000 which was located within the rural townships was included in the study. Therefore, the village population per se was not sampled on an individual community basis.

In order to obtain the trading center and town sampling units, all trading centers between 1,000 and 2,000 in population were given an equal chance at being selected, as were the towns between 2,000 and

16,000. Overall four the of former, and six of the latter were randomly sampled, and as they had a reasonable geographic spread, no substitutes were needed. Finally, ten city neighborhoods were randomly selected from Iowa cities over 16,000 in population. This operation involved dividing the census manuscript books of each city into equal segements of 3,000 households each, and randomly choosing ten segments from which a random sample of households could be drawn..

All heads of households from the sampling units were then systematically sampled from the manuscript books of the 1925 census according to a predetermined ratio. Every other household head and his family were taken from the rural townships, every fifth household head from the villages, and trading centers, and every tenth household in the towns and cities. The result was that each household in Iowa had an equal chance of appearing in the sample, and that all farming types and urban occupations are represented in proportion to their numerical importance. we have Iowa in microcosm in our sample.

The stage was then set for the tracing process to begin through other records so that the basic model of family characteristics, schooling, and occupation could be obtained for as many 1925 heads of household as possible. The 1925 census asked each individual the names of both parents, and this key piece of information permitted a strategy of a backwards trace for intergenerational information. This allowed us to first search the alphabetized 1915 state census for important intergenerational data, such as earnings in 1914, and occupation, and second, to use the federal soundex indexes to obtain information on the fathers of our heads of households. The whole sample was then traced through the Soundex indexes of 1880 and this information was utilized to find occupational and wealth material in the population and agricultural censuses of that

year. A similar process was adopted using the Soundex indexes of the 1900 Federal census in a quest to find intergenerational data for those heads of households not found in previous searches. Since older and richer persons are easier to trace, our intergenerational data is based on a slightly biased sample. Use of various background controls, however, reduces the effect of this bias on our conclusions.

There is little doubt, then, that in the period under analysis, Iowa was part of the richest and most modern rural society in the world. According to the 1930 census, only a few counties in the state failed to score over 80% on an index designed to calculate farm modernity. The index calculated the percentage of farms with electricity, a telephone, a radio, an automobile, and piped water. Of all the states in the union, Iowa received the highest rating.[29] It was unfortunate that suitable data from poorer midwestern states was not available to make legitimate comparisons, and this will obviously limit findings. Still, Iowa in the first two decades of this century was representative of a large part of America, and especially of the midwest. In fact, Iowa was probably representative of fifty percent of the nation that was non-south, and non-metropolitan. For even though the cornbelt did not cover much of this area, the northern rural/small city social, educational and ethnic structures resemble Iowa fairly well.

Notes - Chapter II

1. For the transformation of the Iowa prairie see Allan G. Bogue, From Prairie to Cornbelt (Chicago: University of Chicago Press, 1963).

2. Earle D. Ross, Iowa Agriculture: An Historical Survey (Iowa City: Iowa State Historical Society, 1951), p. 121.

3. Keach Johnson, "Iowa Dairying at the Turn of the Century: The New Agriculture and Progressivism," Agricultural History, 40 (1971), pp. 95-110.

4. For the rationalization of agriculture in the "golden age" and after, see Ross, Iowa Agriculture, Chapters VIII and XI.

5. H. Thomas Johnson, "Postwar Optimism and the Rural Financial Crisis in the 1920's," Explorations in Economic History, 11 (1973-74), pp. 173-192.

6. Ross, Iowa Agriculture, Ch. 10; John Shover, Cornbelt Rebellion (Urbana: University of Illinois Press, 1965), passim; Jerry Alvin Neprash, The Brookhart Campaigns in Iowa, 1920-1926 (New York: Columbia University Press, 1932), passim.

7 George S. May, "Iowa's Consolidated Schools," The Palimpsest, XXXVII (January 1956) pp. 29,32.

8. Lowell K. Dyson, "Was agricultural Distress in the 1930's a result of land speculation during World War I?: The Case of Iowa." Annals of Iowa, 40(1971), p. 584.

9. C.L. Holmes, "Types of Farming in Iowa," Iowa Agricultural Experiment Station Bulletin, 256, 1928.

10. The post World War II phenomenon of agriculture dominated by corn and soybeans had not come into being. In 1925 33% of the cultivable land was devoted to corn; 18% was taken up by oats, 9% to hay, 10% to miscellaneous crops, while 30% remained pasture. The state sold only 15% of its corn crop, and most was consumed by farm stock. Almost 40% of Iowa farm income came from hog breeding. The large percentage of land devoted to oats was an indicator that horses still figured prominently as draft animals. In the sample townships less than 20% of all farmers used tractors in 1925. Details on Iowa crops are found in Holmes, "Types of farming in Iowa," p. 132.

11. Actually compulsory attendance laws made little difference to the patterns of school attendance of 6-14 year olds. In Iowa the school terms were a minimum of 120 days which gave ample time for farm children to help on the farm. For attendance legislation see Clarence Ray Aurner, History of Education in Iowa (Iowa City: Iowa State Historical Society, 1914), I, p. 146.

12. For comparisons of the accessibility of rural schooling in other states, see Albert S. Blankenship, The Accessibility of Rural Schoolhouses in Texas (New York: Teachers College, 1926), p. 26.

13. Richard Jensen, The Winning of the Midwest: Social and Political Conflict, 1888-1896 (Chicago: University of Chicago Press, 1971), Ch. 5.

14. Bird T. Baldwin, et al. Farm Children: An Investigation of Rural Child Life in Selected Areas of Iowa (New York: Appleton, 1930), p. 136.

15. Ibid., p. 137.

16. J. F. Abel, The Consolidation of Schools and Transportation of Pupils (Washington, D.C.: Dept. of Interior, Bureau of Education, 1923), Rural Education Pamphlet No. 41, p. 21-22 for trends of consolidation in midwestern states.

17. For a reassessment of the superiority of the large school as opposed to the small in an era when teaching technology was available see Roger G. Barker and Paul V. Gump, Big School, Small School (Palo Alto: Stanford University Press, 1964) which analyzes the Kansas scene.

18. Edward T. Snively, "The Boy and the School: A Partial Survey of the Public Schools of Ford Dodge, Iowa, "Department of Extension, Iowa State College, 1917, p. 15. Typical remarks of pupils included the following: "Too much sitting around"; "Got tired of books"; "Wanted to do something"; "Got tired of doing nothing". See also Erwin E. Lewis, "Work, Wages, and Schooling of 800 Iowa Boys," State University of Iowa Extension, Bulletin No. 9, 1915, for similar results in Des Moines and Sioux City.

19. Baldwin, et al. Farm Children, p. 153.

20. Ibid., p. 42.

22. Some cities in Iowa compared very favorably with others nationwide. Des Moines and Cedar Rapids were 5th and 6th respectiavely in the amount of money spent per pupil in their population group. Dept. of Interior, Bureau of Education, Biennial Survey of Education, 1918-1920 Washington, D.C., 1920), p. 115.

23. For a description of these materials and the advantages and limitations of the Iowa state censuses see Mark Friedberger, "Cornbelt and River City: Social Change in a Midwest Community, 1885-1930," Unpublished Ph.D dissertation, University of Illinois, Chicago, 1973, pp. 328-330. The original schedules are at the State Archives in Des Moines, but the Newberry Library has a representative sample on microfilm.

24. For Soundex Indexes and how to use them, see Charles Stephenson, "Tracing Those Who Left: Mobility Studies and the Soundex Indexes to the U.S. Census," Journal of Urban History, I (1974), pp. 73-84.

25. Secretary of State of Iowa, Census of Iowa: For the Year 1925 (Des Moines: State of Iowa, 1926), p. xxviii.

26. Holmes, "Types of Farming in Iowa," passim for the farming areas of the state.

27. These studies included, Paul S. Pierce, A Social Survey of Three Rural Townships in Iowa (Iowa City: State University of Iowa, 1917); George H. Van Tangeln, et al., "A Rural Social Survey of Hudson, Orange, and Jesup Consolidated School Districts, Black Hawk and

Buchanan Counties, Iowa," Iowa Agricultural Experiment Station, Bulletin No. 224; George H. Van Tangeln, "A Rural Social Survey of Lone Tree Township, Clay County, Iowa," Iowa Agricultural Experiment Station, Bulletin No. 193; Edward O. Moe, and Carl C. Taylor, "The Culture of a Contemporary Rural Community: Irwin, Iowa," Department of Agriculture, Rural Life Studies, 5, December 1942.

28. George Gillespie, "A Social Survey of Jackson Township, Warren County, Iowa," Unpublished MA thesis, Iowa State College, 1923.

29. Carl C. Taylor, Helen W. Wheeler, and E.L. Kirkpatrick, "Disadvantaged Classes in American Agriculture," Social Report No. VIII, Department of Agriculture, 1938, p. 114.

CHAPTER III

Education and Social Structure

From the state's founding, Iowa had a number of advantages which made education a priority among the important minority of the population. The pioneer Yankee elite had a strong interest in education and sought the advice of Horace Mann when it set up the framework for the state educational system.[1] The elite helped found a number of colleges which brought a veneer of higher learning to the rolling prairies. Equally important for building the foundations of educational policy, Iowa's rich farmlands made its population reasonably generous by 19th century standards in voting taxes for the maintenance of local country schools. Iowa could afford to invest in modernity. The layout of the state in a grid pattern, its centrally placed county seats, and its one-room schoolhouses set at geometric intervals in each township and controlled locally produced a 19th century realization of the Jeffersonian ideal of a rural society dominated by independent yeoman. Still the standards of the mid-19th century were no longer applicable to those of the early 20th century--and most thoughtful Iowans knew it.[2] As late as 1910 the state did not allocate any funds for primary or secondary education, forcing local authorities to finance education entirely from property taxes. Two other midwestern states, Wisconsin, and Minnesota, had begun appropriating state funds for rural high school education, as had a number of other "progressive" states. Iowa, however, remained in the company of the south, and Illinois, Missouri, and South Dakota in making no provisions for state aid to education.[3]

This chapter seeks to provide and analyze material which is basic to fulfilling the first aim of this study: to assess the extent of

educational attainment in a rurally oriented society, to gauge what types of education most Iowans obtained, and to look at patterns in the education of their children. But first let us return to the actual communities sampled to gain a better feel of Iowa in the first years of this century.

The Texture of Communities

Although the census bureau designated urban communities as places over 2,500 in 1920, there has been considerable debate ever since over this classification. In Iowa, where "a city" meant something very different than what it did in an eastern industrial state, communities can be classified more specifically. In most instances our dividing line when we talk of "urban" Iowa signifies any community over 1,000 in population. However, there is a need to clarify the position of villages (places with populations of 10 through 999) and trading centers (communities between 1,000 and 1,999) in the hierarchy of communities.[4]

About 8% of the Iowa population lived in villages in 1925. Villages served a dual function: they acted as the center of the local trading area for the surrounding farm community, and also as the most usual place of retirement for farmers--this before the age of well maintained geriatric homes in the major Iowa cities, and in Florida and the southwest. A "typical" Iowa village consisted of a crossroads community, with a couple of banks, two or three groceries, a hardware store, a blacksmith's shop, a gas station and garage, a restaurant, a post office, a doctor and a lawyer, a grain elevator, and, if it was on a railroad line, a station. Villages had their own school systems, which usually contained

a graded elementary school and at least two grades of high school. A "typical" trading center under 2,000 in population duplicated all these facilities, but since it was a larger community, its services were of a higher standard and they had more variety. In addition, a number of trading centers of this size were also county seats which not only added substantially to the towns importance as a judicial center with an added number of professionals, but also transformed the community aesthetically. For in a county seat the courthouse, and the courthouse square, invariably added a certain tone to what otherwise would have been an utterly ordinary appearance and atmosphere. The educational facilities in a trading center also reflected its greater importance and larger size.

To be sure the gradations between villages, trading centers, towns, and even the larger cities over 16,000, were somewhat blurred. However, they were specific enough to differentiate between urban Iowa and village Iowa. But was there a similar distinction between open country areas and the villages? From the viewpoint of education, which is central to this study, there would seem to be definite line of demarcation between graded schools and one room country schools. In addition, the spatial layout of the farms in the state allowed for a physical separation of farmer from villager. It was almost universally true that the farm house was located on the prairie outside villages, near, or in the center of, the land which the resident farm family cultivated. One key demographic pattern differentiates villages from open country. As many as 55% of the open country heads of household were under 45 years of age in 1925, only 40% of the village population was in this age bracket. Open country Iowa, which also had proportionately a younger head of household population than any other of the urban areas, was agriculturally distinctive also. In the cornbelt, unlike other farming areas in the

nation where vast acreages were useless for any form of cultivation, under 10% of Iowa land was unsuitable for agriculture. Once the prairie was drained, a farmer could turn his 80 or 160 acres into an intensive operation using methods which resemble to a remarkable degree some kind of small processing plant. The factories in the field metaphor could not be applied in every area of the state. Some land had high gradients, and poor soil, or was too wooded for the high pressure agriculture of the flat prairies. But the monotony of the cornbelt, with its thousands of acres of corn and small grains, its farmsteads, barns, cribs and windmills, and its dirt roads running due north-south and east-west can be deceiving. For Iowa contained a remarkably varied number of communities which would surprise an outsider.

Our 61 different sampling places showed this variety, and at the same time we believe were a representative cross section of the state. (See Figure 3.1).

The Texture of Communities

The open country townships ranged from a marginal agricultural and coal mining community in Appanoose county on the Missouri border, to a corn and cattle rearing township in northwest Clay county with characteristics which would be called "typical cornbelt." With one exception the poorest townships, by Iowa standards, were all situated in the southern triangle which had its apex at Des Moines and went roughly southeast and southwest to the Missouri border. For the most part our sample townships in this triangle were 100% old stock in ethnic composition; however, elsewhere in the state the population was more ethnically varied. The only totally ethnic rural sampling points included Military in Winneshiek, and Pleasant Valley in Carroll which were German Catholic; Lincoln in Scott, an

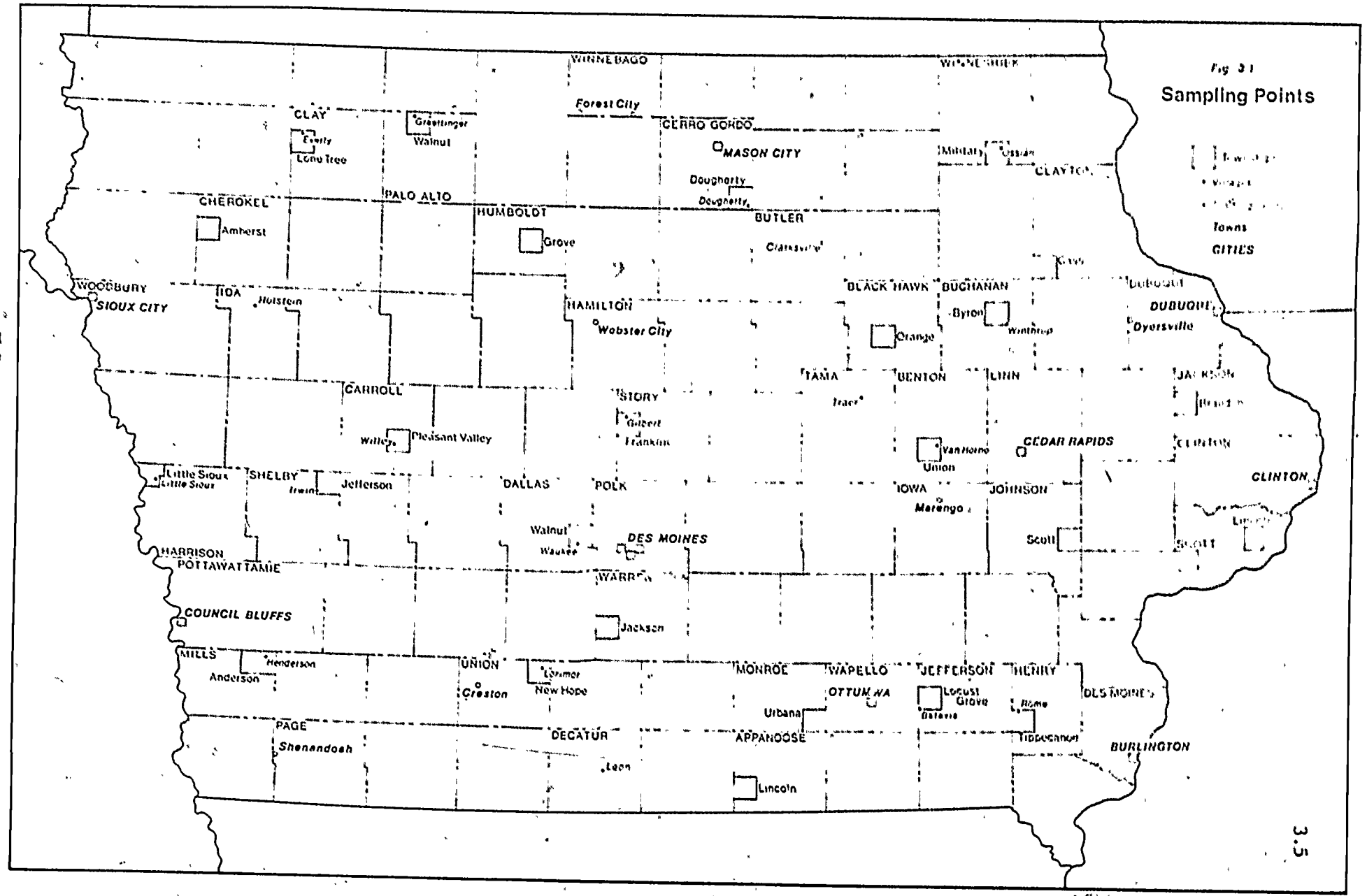


Fig 3.1
Sampling Points
Towns
CITIES
WINNEBAGO
Forest City
CLAY
Greettinger
Walnut
Everly
Long Tree
CERRO GORDO
MASON CITY
Mitchell
Osage
CLAYTON
Dougherty
CHEROKEE
PALO ALTO
HUMBOLDT
BUTLER
Amberst
Grove
Clarksville
WOODBURY
SIOUX CITY
IDA
Holstein
HAMILTON
Webster City
BLACK HAWK
BUCHANAN
DUBUQUE
Byron
Orange
Dyersville
TAMA
BENTON
LINN
JACKSON
CARROLL
STORY
Gilbert
Franklin
Pleasant Valley
Van Horne
Union
CEDAR RAPIDS
CLINTON
Little Sioux
SHELBY
Irwin
Jefferson
DALLAS
POLK
IOWA
JOHNSON
Marengo
Walnut
DES MOINES
Scott
HARRISON
POTTAWATTAMIE
WARREN
COUNCIL BLUFFS
Jackson
MILLS
Henderson
Anderson
UNION
Lorimer
Creston
New Hope
MONROE
WAPELLO
JEFFERSON
HENRY
OTTUMWA
Locust Grove
Urbana
Batavia
Rome
DES MOINES
PAGE
Shenandoah
DECATUR
APPANOOSE
Tippecanoe
BURLINGTON
Leon
Lincoln

agnostic German community; and Dougherty in Cerro Gordo, which was Irish Catholic. Furthermore, a number of townships in the northern part of the state had more German Protestants, and Scandinavians than they had old stock Americans. But no one ethnic group dominated townships such as Jefferson in Shelby, Grove in Hubboldt, and Franklin in Story.

Undoubtedly the "model" rural community in the sample was Orange in Black Hawk, just south of Waterloo. Treated with some deference by state authorities, the township was the subject of the first sociological survey conducted by the rural sociology section at Iowa State College around 1917. The township was a community of Dunkards, or as they called themselves in 1925, United Brethren. Composed of Pennsylvania Dutch, they had originally migrated from Somerset county, Pennsylvania from the 1870's onwards. It was the strength of its open country church which gave Orange its distinctive modern flavor, for its vigorous membership not only sponsored religious activities, but also a well run educational program. In addition, the community ran five different cooperative organizations which included a telephone company, an egg selling association, a threshing and cow testing cooperative, and a creamery. It was not surprising that in such an atmosphere the farmers combined in 1916 to build a consolidated school, which, with one other, was the only genuinely "open country" consolidated school in the sample. An average of 12 in each class graduated from the high school each year. All in all the satisfactory standards prompted a US Office of Education researcher to praise the system which he maintained compared well "with the best systems in the state."[5] Orange, township was obviously an exceptional environment; its strong religious base fostered social programs which enlivened and solidified the community. Parents had a respect for

education, and they preferred to invest in what Baldwin called "enduring values," rather than solely material pursuits.

Although no other rural township in the sample approached the organizational leadership showed by Orange, a number of villages within sampled townships had consolidated schools which catered to the needs of the children of the village and surrounding area. Probably the best organized were the schools at Gilbert just north of Ames in Story County, and in Waukee ten miles west of Des Moines in Dallas. While it would be incorrect to suggest that consolidation, or progressivism in rural Iowa education occured in areas dominated by urban centers--much of the consolidation took place in the isolated northwestern part of the state--these two villages did benefit from being near large towns. As was the case with Orange, teachers in these communities could be attracted and held by the systems when there was some promise of urban diversions. In all 17 out of the 25 sampled townships had had grade schools and high schools within their boundaries in 1925. Of the townships which did not, only four could be classified as isolated. One near Iowa City sent a number of its children to the nearby university town to school; and another township outside Davenport was in reasonable commuting distance of first class secondary school facilities. In general, however, a large percentage of children relied on the local township school for their education. The distance from school was an important factor in high school attendance. As many as 90% of all children who lived within one mile of a high school had some high school training in the late 1930's, whereas only 39% of children who lived ten miles from a high school enrolled.[6] Although a decade earlier in very similar conditions secondary education was available, or near at hand, it needed a special

Table 3 1

Characteristics of Rural Townships and Villages

Community	1	2	3	4	5	6	7	8	9	10
Lincoln, Appanoose (77)	4.49	45.1	8289	64%	$659	6.4	9%	2%	62%	7%
Union, Benton (54)	4.70	42.3	33071	22	774	6 3	3	33	116	24
Van Horne, Benton (35)	3.28	51.1			900	5.8	11			
Orange, Black Hawk (91)	4.26	43.2	31313	62	959	8.8	13	33	129	24
Byron, Buchanan (61)	4.15	42.3	20244	50	811	8.3	18	14	104	15
Winthrop, Buchanan (40)	3.90	46.9			1009	8.1	20			
Pleasant Valley, Carroll (59)	5.37	41.7	28109	17	990	6.2	1	30	116	18
Willey, Carroll (5)	3.50	60.2			1365	4.2	0			
Cass, Clayton (79)	3.92	43.0	18052	29	651	6.3	0	6	92	10
Dougherty, Cerro G (52)	4.98	43.7	27909	27	553	6.3	1	13	98	
Dougherty, Cerro G (12)	5.16				710	7.4	8			
Amherst, Cherokee (57)	5.14	42.9	28870	23	1801	7.5	0	20	115	34
Lone Tree, Clay (50)	4.38	37.8	21100	26	684	8.0	4	31	89	16

Table 3.1 (Cont.)

Characteristics of Rural Townships and Villages

Community	1	2	3	4	5	6	7	8	9	10
Everly, Clay (31)	3.87	48.1			031	7.9	32			
Walnut, Dallas (109)	3.87	42.3	29805	59	1270	6.9	9	30	84	28
Waukee, Dallas (26)	3.11	48.3			1562	8.6	43			
Little Sioux, Harrison (87)	3.80	46.0	10495	76	637	7.1	9	35	84	25
Little Sioux, Harrison (12)	3.50	53.7			952	8.2	8			
Tippacanoe, Henry (64)	3.78	48.7	7320	84	336	6.5	4	26	121	23
Rome, Henry (8)	5.00	41.1			316	7.8	12			
Brandon, Jackson (60)	3.91	45.4	7493	68	663	5.3	1	3	78	12
Humboldt Grove (60)	4.36	39.5	25471	28	1240	7.2	5	20	113	15
Locust Grove, Jefferson (49)	4.21	49.0	17363	80	1067	8.2	10	13	98	17
Batavia, Jefferson (29)	4.06	45.2			964	8.6	20			
Scott, Johnson (74)	4.33	44.5	23721	41	1230	7.8	24	18	106	36

Table 3.1 (Cont.)

Characteristics of Rural Townships and Villages

Community	1	2	3	4	5	6	7	8	9	10
Anderson, Mills (105)	4.57	42.4	16684	70	658	8.1	16	35	122	54
Henderson, Mills (8)	3.12				950	9.3	25			
Urbana, Monroe (66)	4.19	46.9	9731	77	879	5.8	1	2	82	18
Walnut, Palo Alto (67)	4.91	43.7	14558	22	942	6.5	2	4	97	7
Graettinger, Palo Alto (41)	4.22	48.4			750	7.6	14			
Lincoln, Scott (49)	4.20	43.8	19577	16	890	8.7	14	30	139	73
Jefferson, Shelby (70)	4.54	43.8	25728	45	778	8.5	8	17	117	38
Irwin, Shelby (20)	3.35	55.3			863	9.3	30			
Franklin, Story (100)	3.83	45.8	18612	61	723	8.3	13	17	105	17
Gilbert, Story (14)	3.07	58.7			1180	7.2	7			
New Hope, Union (64)	4.34	45.0	10979	80	513	6.9	9	10	86	15
Lorimor, Union (32)	3.75	48.9			873	8.2	15			

Table 3.1 (Conc.)

Characteristics of Rural Townships and Villages

Community	1	2	3	4	5	6	7	8	9	10
Jackson, Warren (66)	4.34	43.3	10819	50	584	7.6	15	11	81	13
Military, Winneshiek (58)	5.39	41.8	20428	3	991	6.5	1	11	109	13
Ossian, Winneshiek (52)	3.76	53.4			1250	8.3	21			

Key to Column Variables:

1 Mean Household Size
2 Mean Age Head of Household
3 Farm Value 1915 in Dollars
4 % Old Stock
5 Mean Earnings 1915
6 Mean Education Household Head
7 % High School Graduate
8 % Farms with Tractors
9 Ratio of Autos to Farms
10 % Farms with Radios

effort on the part of both rural parents and children alike to obtain a high school diploma.

Most Iowa trading centers, and towns, had standardized their school systems by 1900. This meant that they all had a high school, and perhaps two elementary schools by the turn of the century. The majority of the cities in the sample had high schools operating by the second half of the 1879's, with the eastern cities such as Dubuque and Burlington, whose high school opened in 1868, showing the lead.

Although one of the four towns in the sample with a population below 2000 was a county seat, Clarksville, Holstein, Traer, and Leon, were basically trading centers serving, like the villages, a farm hinterland. Leon with an appearance and reputation of a Missouri community was the county seat of Decatur in an area of the "southern triangle" plagued by poor soil and a population intent on out-migration. Both Traer and Clarksville were north central towns serving as retirement and trading centers for farmers in prosperous counties. And Holstein, in the northwest, as its name implies, was a center for a population whose roots went back to the German province of that name, and was therefore heavily German Lutheran.

The medium sized towns in the sample showed a greater variety in their ethnic composition and in their economic base. Shenandoah (population 5500 in 1925) was, despite its position on the edge of the southern triangle, a center of entrepreneurial initiative. The town from the early part of the century was a center of the seed industry, and rather than corn fields, much of the acreage around the town was devoted to horticulture. In complete contrast was the smaller German Catholic community of Dyersville (population 2100) in western Dubuque County.

In the center of the town was the large Catholic basilica of St. Francis whose spire dominated the skyline for miles around giving Dyersville a distinctly European flavor. With its predominantly Catholic population, the town supported both a parochial and a public school system. In fact, apart from the Catholic schools in Dubuque, and two other catholic villages, this was the only community with parochial schools in the study.

All the other towns in the medium size group were county seats. Marengo (population 2100) a little less than half way between Iowa City and Des Moines on the Rock Island railroad, and Creston, (population 8200) with its Burlington shops, were railroad towns. Forest City, (population 2000) later to be made famous by the motor home builder bearing the name of the surrounding county of Winnebago, was in 1925, purely a farm center and county seat with a predominantly Norwegian population. Lastly Webster City (population 6600) on the Illinois Central main line from Dubuque to Sioux City, was a typical Yankee prairie town in the middle of rich farm land. If a community can be singled out as an example of all that was best in small town Iowa, Webster City would serve splendidly. Its school system was of a high standard, it had good communications, a modern business district, and a fine library.

As was pointed out earlier, the larger cities were sampled by neighborhoods, rather than as a whole, and their characteristics are best shown in this way. If we begin at the eastern end of the state on the Mississippi we find that the neighborhood sampled in Burlington (population 26,000) was largely a blue collar area with a number of men employed at the large railroad works elsewhere in the city. The area in Clinton (also 26,000 total) was also part of the central city, blue collar, and largely settled by railroad workers employed by the Chicago

and Northwestern. Both the Burlington and Clinton samples resembled each other ethnically, with a larger percentage of Germans than any other ethnic group, and more Scandanavians than Old Stock Americans. Both cities had grown only slightly since 1900. Still further north on the river in Dubuque (population 41,000), the sampled neighborhood was part of a new housing tract in the southwestern part of the city high on the bluffs overlooking the downtown area and the Mississippi. Because this was a middle class area, a stong Catholic representation was not as pronounced as it might otherwise have been in another neighborhood. About a quarter of the sample were Irish Catholics, another 25% German Catholics, with the remainder Old Stock Protestants.

Cedar Rapids (population 55,000) provided this study with its only city neighborhood which could be singled out as upper middle class: the sample was taken from the northwestern part of the city in an area which contained large homes and newer apartment buildings, with well tended lawns, and elm lined streets. A number of the blue collar sample members turned out to be servants, or in one case a gardener. In contrast the sample from Ottumwa, (population 26,000) like those from the other southern Iowa urban areas sampled, was almost totally old stock, but also had the lowest mean status score of all the city communities sampled. The neighborhood was across the Des Moines river from the Morrell meat packing plant, the largest employer in the city, and was predominantly a community of transplanted rural migrants.

The largest industrial concerns in and around Des Moines (population 141,000) in 1925 were coal mines; otherwise, apart from the railroads, it was to a considerable extent a white collar city with insurance and state government the principal large employers. Fortuitously our sample

randomly picked three areas which were fairly representative of the city as a whole. The first on the northwestern side of the city near Drake University, was a newly planted area of middle class Iowans who made a living in insurance, real estate, or owned medium sized businesses. Although this area was not as affluent as the "stockbroker Tudor" belt a little to the south, its residents were upwardly mobile individuals whose large home mortgages fitted the fast paced atmosphere of urban America in the 1920's. The second neighborhood in Des Moines was an area of apartment and rooming houses on the western edge of the downtown area. As the only representative in the sample containing "a big city" flavor, this was a transient neighborhood, but did contain a minority of high status childless couples, and single professional males. Generally this was an urban area typical of many large cities in the country with a mobile population of white collar workers living within walking distance of their work in downtown offices. Our final Des Moines sample locality was in a rundown section which surrounded the State Capitol. Over 20% of this neighborhood was southern born, and from a status point of view, only the Ottumwa sample scored lower. The neighborhood had a sprinkling of Blacks and Swedes, but otherwise, like the other Des Moines sampling units, was over 65% old stock. Most families lived in overcrowded frame houses, and although it could hardly be called a slum area, the neighborhood clearly needed physical rejuvenation.

Like Webster City, Mason City (population 23,000) was a prairie town with a pleasant central area dominated by a tree lined square. After Ames, Mason City was the fastest growing place in Iowa, and city fathers had sensibly ensured that the community's only industrial concern, a huge cement plant, was banished to the outskirts. Hence our sampling area, a middle class neighborhood with the inevitable elm trees and

Table 3.2
Characteristics of Towns, and City Sampling Points

Community	1	2	3	4	5	6	7	8
Towns:								
Clarksville (74)	3.29	53.3	99.1	12.0	58%	$855	7 2	16%
Holstein (69)	3.60	52.2	99.6	14.1	10	1282	7.3	17
Traer (82)	3.28	49.8	100.4	22.7	50	1076	8.4	17
Leon (115)	3.08	50.9	98.0	10.2	90	613	7.8	24
Shenandoah (146)	3.72	49.5	97.8	8.5	80	926	7.0	11
Forest City (52)	4.20	50.2	105.7	16.2	25	1024	7.2	15
Webster City (160)	4.10	46.5	101.3	12.3	64	1028	8.9	22
Dyersville (48)	4.95	49.5	101.2	11.6	4	708	6.8	10
Marengo (64)	3.56	50.7	95.9	6.2	55	769	7.7	17
Creston (200)	3.51	46.4	98.5	9.8	64	762	7.9	17

Table 3.2 (Cont.)
Characteristics of Towns, and City Sampling Points

Community	1	2	3	4	5	6	7	8
Cities:								
Des Moines West (117)	3.41	39.8	102.8	11.3	68%	$871	10.5	47%
Des Moines Central (94)	3.28	43.6	98.7	10.9	63	737	8.9	26
Des Moines East (92)	4.12	43.7	94.7	6.4	69	607	7.2	8
Dubuque (96)	3.86	48.0	101.8	15.8	21	831	8.2	17
Burlington (101)	3.86	46.5	97.7	8.6	39	686	8.2	16
Clinton (100)	3.37	43.9	98.1	7.2	30	608	8.0	16
Cedar Rapids (97)	3.63	46.3	107.1	15.1	57	1347	10.0	41
Mason City (48)	4.16	49.5	105.0	16.4	44	1632	8.0	20
Ottumwa (51)	4.09	46.0	94.3	7.4	76	579	7.1	11
Sioux City (94)	3.87	43.3	97.7	7.7	39	777	8.0	21
Council Bluffs (95)	4.13	42.6	94.7	5.3	58	625	7.1	7

Key to Column Variables:

1 Mean Household Size
2 Mean Age Household Head
3 Mean Community Socio-Economic Status
4 S. D. Community Socio-Economic Status
5 % Old Stock
6 Mean Earnings 1915
7 Mean Education
8 % High School Graduates

Note: The city sampling points were neighborhoods, and not samples of the total city population.

frame houses, was shielded from anything that would sour the atmosphere.[7]

Finally our two western Iowa city neighborhoods in Sioux City and Council Bluffs were similar in their ethnic heterogeneity, blue collar status, and overall appearance. In Sioux City (population 76,000) the area chosen was on the northwest fringes of the city, "a blue collar suburb," with a number of residents working across town at the meat packing plant. Further south on the Missouri river, Council Bluffs (population 40,000) was one of the larger railroad junctions in the midwest, with no less than eight main lines converging. Not suprisingly most men in the sample were connected in some way to making a living on the railroad, and lived on either side of the main street of the city within easy reach of the railroad yards to the south.

To be sure there was considerable socioeconomic distance between our sophisticated upper middle class sampling area in Cedar Rapids and the hill farmers scratching a living on some of the poorest land in the state in Brandon Township in Jackson county on the Mississippi. However, one common bond held all Iowans together: a close proximity to the land. For the vast majority of urban dwellers were only one generation off the farm. Whether they were Italian coalminers working in the deep shaft mine in Walnut Township near Des Moines, or a druggist in Creston, or a credit manager in Des Moines, or a Scottish golf professional in Cedar Rapids, all these men had left rural backgrounds behind in Europe or Iowa, and had not followed their fathers into farming. In short no one in the state in 1925 was very far removed from a "country past."[8]

While we would commit an ecological fallacy in discussing the citywide educational system in regard to our sampling units in the larger Iowa communities, it would seem obvious that potentially all

urban children would have some advantage over rural and village children because of superior facilities. Whether it was advantageous to come from a small town or a city as far as educational and occupational achievement was concerned is something we shall endeavor to find out. Certainly there were advantages and disadvantages to both types of community. The primary schools in most cities would be more homogeneous than those in small towns. This might or might not have been an advantage to lower class children who would not have to compete with those from more affluent homes. On the other hand, teachers competed for positions in the schools with the highest status children, and inevitably the best facilities and equipment were found in the schools on the right side of the tracks. In the smaller community as Hollingshead has shown, status did preoccupy a large amount of time and energy in the neighborhood of the school, but the competition of a heterogeneous environment might possibly have stirred the lower status child to greater achievement.[9]

If secondary schooling was available to all urban and village residents, college education was another matter. In the 1920's the authorities did begin opening junior public colleges in selected cities, but for the majority of our sample a college education necessitated moving away from home.[10] Only four cities in our sample had four year liberal arts colleges in them. Drake University in Des Moines catered for commuter students, especially in its professional schools, but like nearby Des Moines University, was predominantly a four year liberal arts college. In Cedar Rapids there was Coe, a small denominational four year school which was largely boarding orientated. Dubuque had two denominational liberal arts colleges, and Sioux City had one which was commuter orientated. But by and large, most Iowans who went away to

college enrolled at one of the three state universities in Iowa City, Ames, or Cedar Falls. As we shall see later in the study, they were a select group.

Type of Schooling and Social Structure.

Considering the primacy of the country school in the history of education in the United States, it is remarkable that almost no career analysis has ever been undertaken to inquire to the advantages or handicaps of rural "one-room" schooling. Numerous studies were undertaken from the 1920's onward which used sophisticated testing procedures to show that country schools, contrary to public belief at the time, were considerably inferior to either consolidated school or graded village schools in disseminating the fundamentals of education to their pupils.[11] In order to investigate Iowa patterns, we will divide the population into three basic categories: those who had secondary schooling (9th grade or above); those who attended a graded primary school (either in a town or in a consolidated rural school); and those who were country school educated. With the population categorized in this way, a feeling for the spread of educational attainment, the effects of different social and economic background upon education, and in turn the influence of the type of schooling had on men lives, can be better understood.

A fundamental question worth answering at the outset is whether the educational experiences of the men in this study reflected the gradual improvement of education in the Midwest. It is reassuring to note that if the attendance of graded primary or secondary schooling is taken as a rough indicator of progress, then the early twentieth century was a time of steady gains. Table 3.3 shows that decade by decade fewer in each age group attended only country schools. Of the oldest cohort in the

Table 3.3

Age and Type of Schooling
1925 in Percent
(read down)

Type of School/Age	Under 24	25-34	35-44	45-54	55-64	65+	total
Country only	22	26	33	44	52	62	
Graded Primary	32	38	38	34	31	26	
Secondary or more	46	36	29	22	17	12	
N	152	935	988	892	652	512	4131
%	3.7	22.6	23.9	21.6	15.8	12.4	100%

Table 3.4

Locality, 1925 and Type
of Schooling in Percent
(read down)

Type of School/Locality	Open Country	Village	Trading Center	Town	City	
Country only	53	37	43	33	17	
Graded Primary	27	34	23	41	49	
Secondary or more	20	28	35	27	33	
N	1768	363	340	671	989	4131
%	42.8	8.8	8.2	162	23.9	100%

study, those 65 or above in 1925, 62% had acquired their educational experience in "the one-room" school house, and 12% had gone to a high school. Whereas the youngest generation, born after 1900, only 22% were country school educated, and 46% had at least some high school experience. Presumably these patterns can be largely attributed to gradual urbanization, and school reorganization, and however much it was distasteful to rural people, the influences of town culture on the country neighborhood. For it was also noticeable that there was much less variations in the proportion of each age group who went to elementary grade schools but never continued. In the towns where grade school was standard, and bureaucratic controls were uniform, change was less marked. These data would seem to indicate that the most interesting patterns of change might come from those with country backgrounds.

While we will investigate this more thoroughly in a later chapter on social mobility, a glance at table 3.4 shows that when Iowa was divided into ecological areas, country schooling remained the usual experience of all except those living in trading centers, towns, and cities. As many as 55% of all rural dwellers, had only attended a one-room school and rural origin of the population which highlighted by the fact that over a third of the village, trading center, and town population had this educational background. In every type of community Iowans quit school at the eighth grade or before, rather than continuing their secondary education. One other pattern in the ecological distribution of educational attainment by type of schooling, needs comment. In urban Iowa, trading centers, had proportionately the largest number of rural educated heads of household, and also the greatest number of those who had some secondary schooling. As has been already indicated, trading centers performed a double function. They were at once and the same

time a retirement haven for farmers, and a central service point for surrounding countryside. With few industrial workers within them, this caused a dichotomy in the occupational structure which placed retired farmers, and farm labors on one side, and the merchants and professionals, who were better educated, on the other. Apart from these discrepancies and the fact that relatively few city dwellers attended rural schools, educational attainment patterns were fairly uniform throughout the state, another indicator of homogeneity in the different types of community.

When the extent of rural education was compared with the ascribed characteristics such as place of birth, religion, and ethnicity, some further patterns emerged to tell us something about the Iowa population. Obviously where an individual was born had an important bearing on his educational chances. Not very surprisingly, those born outside the United States were more likely to have had a scanty education, and were least likely to have attended secondary school.[12] (Table 3.5) At the same time, all in-migrants, except those born in the western part of the country (Kansas, Nebraska, and South Dakota were included here) were also more likely to have only a country school education. The high proportions from the south, Illinois and Missouri, were to be expected in view of the low standards of rural education in both those states and in that region. Easterners formed a somewhat older age group which has migrated to Iowa early in their lives and this caused their concentration within the rural educated. The apparent advantage of westerners, on the other hand was to a certain extent the result of younger age and our classification, not an indication of the superior educational standards in Nebraska and South Dakota. In fact, many of these men came from cities such as Omaha and Sioux Falls, near the Iowa line, and therefore had greater opportunity for secondary education than those with different

Table 3.5

Birthplace and Type of Education, 1925 (read down)

Type of Schooling/ Birthplace	Iowa	East	East Midwest	South	West	Ill.	Mo.	Europe	
Country	36	40	36	40	24	42	46	53	
Graded Primary	33	32	40	37	38	33	33	37	
Secondary	30	20	25	23	38	25	20	11	
N	2388	267	241	57	139	323	147	569	4131
%	57.8	6.5	5.8	1.4	3.4	7.3	3.6	13.8	100%

origins. On balance, the native born Iowans had a more even distribution than non-native, and this tangentially indicated slightly higher standards in Iowa.

Other ascribed characteristics, in particular, religious membership and affiliation were central to our scheme of identifying movers and shakers among the general population for bringing Iowa into the twentieth century. Tables 3.6 and 3.7 show that each ethnic group was generally educated in rural schools, but that the British, the Americans, and the Irish, (who were predominately urban) were more likely to seek secondary education. However, religion alone, or better still, combined with etimicity in the case of Irish and German Catholic did produce more promising patterns to assist in elucidating our hypothesis that pietistic old stock Protestants were modernizers, and that liturgicals were traditionalists when investing in education. The patterns displayed here need careful analysis, for place of residence tended to blur distinctions. However, apart from the Irish and Scandinavians, our formulation did seem to hold up about the perceptions different groups held of the position of education in a modernizing world.

Certainly there is nothing prophetic in predicting that men with rural education should hold low status urban occupations in a disproportionate number. In Table 3.8, as expected, farmers and farm laborers were predominantly educated at rural schools. The only other occupational group with similar backgrounds, the unskilled laborers, were mostly ex-farmers or farm laborers whose luck had run out, and who had moved away from agriculture. For the total population a more precise indicator of differentiating the effect of rural, graded, and secondary education perhaps might be income.

Table 3.6

Ethnicity and Type of Education, 1925

Type of Schooling/ Ethnicity	East/ Southern Europe	Old Stock	Scandi-navian	British	Other N. Europe	German	Irish	
Country	41	38	43	40	45	43	38	
Graded Primary	42	31	41	33	39	39	37	
Secondary	17	32	17	27	17	18	25	
N	88	2190	339	243	83	852	336	4131
%	2.1	53 0	8.2	5.9	2.0	20.6	8.1	100%

Table 3.7

Religion and Type of Education, 1925 (read down)

Type of Education/ Religion	None	Prot Unsp	High Status Prot	Low Status Prot	Lutheran	Catholic	Jewish	
Country	53	28	28	28	46	36	14	
Graded Primary	2	43	20	31	39	46	43	
Secondary	21	29	53	31	15	18	43	
N	977	658	280	1071	491	640	14	4131
%	23.7	15.9	6.8	25.9	11.9	155	0.3	100%

Source: Sample Data

Unfortunately in none of the samples gathered for the study were we able to distinguish between those who obtained primary schooling in the country schools but who went on to high school, and those who obtained all their education in graded systems. For this reason some important insights into the impact of early education on achievement slipped through our grasp. Therefore, this first skirmish with an analysis of economic returns for type of education received, can only realistically make comparisons between non-high school men. In our separate supplementary sample of urban men taken in 1915, country schooling was worth $125.00 less than a graded primary school education. Those men who received between 5 and 8 years of graded schooling earned $165.00 more than those who had spent the equivalent amount of time at a rural, one-room school. Of course, the rural educated men, as rural urban migrants, had several other factors working against them besides their educational background. At this juncture, it would be unwise to give a definitive judgment on the effect of rural education on earnings, because when we look at the material from the main sample (Table 3.9), rural schooling was well represented in both the lowest and the highest income brackets. Obviously, to the farmer past middle age, the ability to earn two thousand dollars or more had little to do with a somewhat skimpy education 40 years before. While these kinds of questions will be tackled in greater detail below, it would seem that type of education at the elementary level did not have much effect on the like chances of individuals who stayed in the environment in which he was raised.

In 1925 the rural school was still very much a force to be reckoned with in Iowa--indeed it still had another 30 years of useful life. However, the fact that well under 50% of male heads of households in a

Table 3.8

Type of Education and Occupation, 1925
In Percent
(read down)

Type of Schooling/ Occupation		Prof	Mgr	Farmer	Small Bus	White Collar	Skilled Bl Collar	Oper-ator	Lab	Fm. Lab	Retd	
Country		2	13	54	16	10	22	22	44	57	53	
Graded Primary		6	18	27	34	35	54	55	45	31	34	
Secondary		93	69	19	50	55	24	23	12	12	13	
	N	121	97	1797	326	175	313	412	486	129	38	3394
	%	3.1	2.5	46.1	8.4	4.5	8.0	10.6	12.5	3.3	1.0	100%

Source: Sample Data

Table 3.9

Earnings and Type of Education
1914
(read down)

Type of Education/ Earnings	500	$500-999	$1000-1499	$1500-1999	$2000+	
Country	41	42	38	36	41	
Graded Primary	32	39	30	31	28	
Secondary	27	19	32	33	31	
N	82	693	429	157	228	2389
%	36.9	29.0	18.0	6.6	9.5	100%

rural state received their only formal education in a country school, was an indication that reform elements had achieved some success in diverting the power of local control. On the other hand, for most males living outside the cities, which included a good proportion of all ethnic groups, rural Catholics and Lutherans, and men without religious affiliation, the "little schoolhouse on the prairie" represented the sole formal educational experience they received in their lives.[13]

Years of Education and Social Structure

There was a pressing need in the late nineteenth century and early twentieth century America for educators to create interest in the classroom. It was as if they were required to sell education to parents and children, to attract children to school, and to keep them there as long as possible. In this quest they were assisted by compulsory educational laws for elementary school children. But for males of 14 years old and over, drop-out rates still remained a problem which vocational education did not really solve. Iowa was no exception to this drop-out syndrome.[14]

Table 3.10 indicates that in all types of communities in the State, except the cities, withdrawal rather than completion was the general rule even before men had reached the eighth grade. As many as 80% of all open-country heads of households, 69% of village, 64% of those who lived in trading centers, 72% of town dwellers, and 64% of city residents did not go beyond the eighth grade. Obviously the decision to enroll in high school not only provided a useful indicator of status, but also showed a serious desire on the part of most individuals to pursue academic goals. This would seem to be a fairly crucial decision, because only in the case of rural dwellers, did fewer heads of households fail to graduate from high school once they had entered.[15]

Table 3.10

Years of Education and Locality
(read down)

Years of Education	Open Country	Village	Trading Center	Town	City	N/%
0-4	13	18	16	12	12	548 13.3
5-7	3.5	23	34	31	20	124 29.6
8	33	30	16	31	35	1290 31.2
Some HS, 9-11	10	10	15	10	11	453 11.0
HS, 12	4	7	8	8	12	297 7.2
Some Coll	4	8	7	6	7	229 5.5
Coll Graduate	1	3	4	2	4	93 2.3
N	1768	363	346	671	989	4131

If we take all high school male graduates as members of an educated elite, they formed the top of the pyramid of educational attainment structure of Iowa. Without question, their advantage was class based, for as Table 3.11 shows intergenerational patterns indicate that the sons of white-collar workers were twice as likely to reach high school as sons of skilled craftsmen. And professionals were five times as likely to go to college as skilled blue-collar workers. A final confirmation of the existence of a well-educated elite comes when we examine the relationship between occupation and the years of education (Table 3.12). While the mean number of years of schooling for males in the state were 7.7 years or slightly less than primary school equivalency, 81% of all professionals had at least 13 years of schooling (one year of college). Even in 1950 national returns showed that among the same occupational group only 79% had the same amount of educational attainment. At the managerial level there was also an impressive showing among Iowans. as many as 36% had been to college, whereas 25 years later at the national level just 26% of managers were college educated.[16] It would appear, that in urban Iowa, education was a prime indicator, if not cause of occupational status. Among lower echelon white-collar workers (clerks) for example, almost 35% had graduated from high school, however, not one was a college graduate and only 2% among small proprietors had attained college degrees.

In the previous section when earnings and type of schooling were analyzed, patterns showed that in this period a dynamic personality, common sense, and helpful relatives, were no less important than educational credentials for making money.

However, the idea that education had some influence on economic performance was already being tested as early as 1911. With impetus

Table 3.11

Father's Occupation and Percentage of High School Graduates and College Matriculates Among Sons, 1925

	N	High School Graduates	College Matriculates
Professional	25	62%	40%
Manager	55	55	35
Small Proprietor	110	40	16
White Collar	18	55	22
Craftsman	145	21	8
Semi-Skilled	52	19	5
Unskilled Laborer	170	5	1
Farm Owner	1212	16	10
Farm Renter	245	1	0
Farm Laborer	13	7	0

Source: Sample Data

Table 3.12

Occupation and Years of Education, 1925

	Prof	Manager	Farmer	Small Prop	White Collar	Skilled Blue Collar	Semi-Skilled	Lab	Fm Lab	Retd	
0-4	2	2	15	6	6	13	10	18	16	24	
5-7	1	13	35	16	9	22	26	40	40	40	
8	5	14	31	27	29	41	42	32	37	24	
Some HS,	3	20	10	19	21	13	13	6	6	5	
HS, diploma	8	17	4	17	25	9	8	4	5	3	
Some Coll,	35	22	4	14	10	3	2	1	0	3	
College,	46	12	1	72	0	0	0	0	0	3	
N	141	97	1797	326	175	313	412	486	129	38	4131
											100%

provided by the Country Life Movement, detailed surveys were undertaken, which among other things, compared educational attainment with earnings. The first such study of several townships which surrounded Ithaca, New York, found a positive relationship between net farm income and amount of education. The Cornell researchers showed that 54% of the country school educated earned $400 or less, 5% earned over $1,000, while 20% of high school graduates had net incomes of over $1000.[17] A combelt study of townships in Indiana, Illinois, and Iowa, produced even more convincing evidence that education made a difference to individual income. Among tenants and farm owners, high school and college training gave impressive returns--in the case of the tenants, college graduates received almost $1000 more than those whose only education was in a country school.[18]

However, neither of these studies attempted to calculate the rate of return of years of college, or for that matter, the total life earnings of men with different educational backgrounds. Two studies in the 1920's did attempt this kind of analysis; and both found that among rather restricted samples there was a strong relationship between amount of schooling and earnings. One study which compared the achievement of brothers, found that the mean income of the one with more education, was $646 greater than that of his brother.[19] The other study found that in 1928 a high school education was worth approximately $24,000 in comparison to a grade school education. At the same time a college graduate could expect $72,000 more than a high school graduate when life time earnings were calculated.[20]

In Table 3.13 there does not seem to be any doubt that when the earnings of Iowans were correlated with age and education, the legacy of educational attainment left its mark--albeit the results were a little less dramatic than those reviewed above. While we acknowledge the small

number of cases who were college and high school graduates, it would seem worthwhile to calculate the amount of earnings foregone by both college and high school graduates. A very rough calculation from the data indicated that high school graduates lost about $1,600 in earnings foregone over four years, and college graduates about $3,200. By the time both groups were forty, high school graduates were earning about $200 more than the elementary school educated. But by the time they had reached sixty they earned more than a thousand dollars more than men who had left school at the eighth grade. Similary the college graduate at forty surpassed the high school graduate by $1,600, and the gap increased with age. By way of summary, each year a man grew older he could reckon on earning $15 more than the previous year. At the same time each extra year of schooling was worth $65 to him. Of course school costs (food, lodging, tuition, and travel) which might have been anything up to a thousand dollars for the eight years of schooling beyond the eighth grade, have been ignored. However, summer jobs, and other marginal ways of earning money, would have lightened this burden. However calculated, the monetary return on investment in schooling was excellent. But how much was due to the schooling itself, and how much to background factors that affected both earnings and the decision to quit school?

As the bridge between education and income has now been established, it remains to document which groups were crossing that bridge, and achieving high occupational status. Educational attainment, or when such material was not available, literacy, has invariably been considered one of the principal indicators of modernity. It would be useful to place an ethno-religious and ecological perspective on the material in order to investigate closely the importance various groups placed upon education. This, in turn, would act as a pointer for what might be

Table 3.13

Years of Education
Age and Income
Iowa, 1915

	Years of Education (N in parentheses)						
Age	1-4	5-8	9-11	12	13-15	16 plus	total
14-17	-	381(23)	229(7)	400(1)	100(1)	-	32
18-21	289(6)	623(19)	439(19)	294(11)	656(5)	-	60
22-24	567(7)	544(87)	682(22)	1111(11)	706(6)	1632(2)	135
25-29	684(19)	818(149)	964(55)	1002(24)	934(22)	1080(5)	274
30-39	886(72)	1033(343)	1227(68)	1189(36)	1511(25)	1630(10)	554
40-49	964(64)	1022(329)	1260(37)	1202(21)	1920(31)	2480(10)	492
50-59	840(84)	1079(203)	1491(17)	1479(15)	1953(12)	2050(4)	335
60-69	883(35)	990(51)	1425(4)	1950(3)	1475(5)	4000(4)	102
70 plus	828(7)	639(10)	-	-	-	-	17
Mean	$855(294)	$922(1281)	$1044(229)	$1155(122)	$1461(107)	$1936(32)	N 2065

Source: Sample Data

termed future-oriented behavior in a society where the pursuit of education required some effort on the part of the pupil and his parents.

Since we have already placed some emphasis on the educated elite, their strength among the different ethno-religious groups would help to delineate the patterns. Table 3.14 displays a listing of college matriculates in each ethnic and religious group. In general the results show that Anglo-Saxons did concentrate more on college than did Continental Catholics and liturgicals. But at the same time, Germans affiliated with American churches showed unexpected strength and Scandinavians weaknesses. German Catholics and Lutherans and Old-Stock Americans with no affiliation or with low status affiliation were handicapped because of their ruralness, and this is underlined because the Irish-Catholics, a predominantly urban group, had a greater percentage of matriculates. But the patterns of the elite are not necessarily those of the general population, and as has been just suggested, place of residence combined with ethno-religious affiliation might possibly have some bearing upon educational attainment. Was this so?

It is arguable that the use of educational attainment to gauge modernity among Eastern and Southern Europeans (Bohemians, Poles, Italians) is little more than a reflection of the lack of opportunity for education in the old country and in America.[21] Their over-all mean of 5.9 years of education, with only 5.1 years among those who lived in the open country, showed the lowest level of educational attainment, and if this criteria passed judgement, more traditional orientated behavior (Table 3.15). Among more established ethno-religious groups, such an indicator was not satisfactory. The spread, among rural people, when no controls were made for religion was small. The British, then Old Stock Americans, followed by Scandinavians, with the Germans and the Irish bringing up

Table 3 14

College Matriculates as a Percentage of the Ethno-religious Population, 1925

Ethno-Religious Group	%	N
Old Stock High Status Protestants	26	49
German High Status Protestants	24	14
British Low Status Protestants	14	3
German Unaffiliated Protestants	14	30
British, No Religion	14	6
Irish Protestants	14	12
German Low Status Protestants	10	15
Old Stock Unaffiliated	10	39
Old Stock Low Status Protestants	8	65
Irish Catholics	6	12
Scandinavian Lutherans	6	35
Old Stock, No Religion	5	67
British High Status Protestants	5	13
German Catholics	4	k6
Scandinavian Unaffiliated Protestants	4	4
German Lutherans	3	11

Source: Sample Data

the rear, were all within one year of each other. More revealing perhaps were the results when ethno-religious controls were placed on the material. For example, German Lutheran farmers had a mean of 7.3 years of schooling, while German Catholics who were farming were limited to 6.6 years of education. In the city, however, each group had 7.9 years. To a certain degree similarities in the education of open country people regardless of ethnic group were due to the cultural isolation of all the ethnic populations. But this isolation was accentuated among rural Catholics. Parochial schooling was available in two of the villages in Catholic townships, but not in the open country itself. Therefore, rural Catholics, already in a situation where rural schooling was mediocre at best, were further handicapped by their having no schools of first choice in the immediate vicinity. It was Baldwin who characterized German Protestants as being, materialist oriented, little interested in education for its own sake, and determined to force their children to work hard at farm chores. From our evidence, it would seem that German Catholics were even more family directed and less future oriented. Unfortunately our data does not permit more definitive insights into attitudinal differences between German Catholics and Protestants in rural Iowa.

As far as the remainder of the sample population was concerned, only a minority, and a small one at that, were mobilized to take advantage of the educational facilities that were available, and to allow their children to take full advantage of them. But, as the data shows, and as was the case with the elite, one particular ethno-religious group, high status old stock Americans, were consistently oriented towards educational aspirations.[22] On the farm, their educational attainment was measured two years ahead of the next group, and in the city they had a mean of 11.6 years of education. In contrast, just to point up the

Table 3.15

Mean Years of Education, Ethnicity, Religion, and Locality, 1925

	Mean	SD	N
Entire Population	7.7	3.06	4131
Southern Eastern Europe	5.9	2.85	85
Open Country	5.1	3.01	31
Open Country, Catholic	4.8	2.90	21
City	6.3	2.9	34
Old Stock	8.0	3.15	2190
Open Country	7.5	2.70	915
No Religion	6.9	2.60	363
Prot Unsp	6.9	2.42	57
High Status Prot	9.3	3.20	52
Low Status Prot	7.9	2.50	409
Village	8.6	3.25	175
No Religion	8.2	2.97	51
Prot Unsp	7.9	4.07	12
High Status Prot	10.2	3.30	14
Low Status Prot	8.9	3.15	85
Trading Center	8.1	3.88	195
No Religion	7.0	3.47	61
Prot Unp	9.0	3.10	27
High Status Prot	11.6	4.10	21
Low Status Prot	7.8	3.85	85
Town	8.0	2.88	398
No Religion	7.7	2.61	94
Prot Unsp.	7.8	2.80	81
High Status Prot	8.8	3.18	59
Low Status Prot	7.9	2.97	143

Table 3.15 (Cont.)

	Mean	SD	N
Old Stock (Cont.)			
City	8.9	3.52	509
No Religion	7.8	3.63	110
Prot Unsp	8.9	3.2	222
High Status Prot	11.6	3.85	42
Low Status Prot	8.4	3.24	101
Scandinavian	7.4	2.60	339
Open Country	7.5	2.20	136
Lutheran	7.4	2.30	72
Village	7.3	3.2	39
Lutheran	7.2	3.4	29
Town	7.5	2.76	65
Lutheran	7.5	2.86	40
City	7.4	2.64	91
Prot Unsp	7.2	2.90	35
Lutheran	7.0	1.80	27
British	7.9	3.14	243
Open Country	7.7	2.90	103
None	7.2	3.08	38
Low Status Prot	8.5	2.81	41
City	8.5	2.91	62
Prot Unsp	8.2	7.56	20
Other North Europe	6.9	3.01	83
Open Country	6.0	2.40	41
Catholic	5.7	2.31	22
City	8.1	3.28	31

Table 3.15 (Cont.)

	Mean	SD	N
German	7.3	2.84	852
Open Country	7.0	2.20	405
No Religion	7.2	2.21	77
Lutheran	7.0	2.01	135
Catholic	6.6	2.18	132
Village	6.8	3.34	85
Lutheran	6.1	3.4	33
Catholic	6.8	3.0	35
Trading Center	6.7	3.02	88
None	5.8	1.76	21
Lutheran	6.8	3.47	48
Town	7.4	3.34	116
Lutheran	6.5	2.19	23
Catholic	6.6	2.54	47
City	3.4	3.23	158
None	8.8	2.78	20
Prot Unsp	8.1	3.39	45
High Status Prot	11.2	3.81	13
Lutheran	7.91	2.68	24
Catholic	7.92	2.75	39
Irish	7.76	3.03	336
Open Country	7.13	2.65	137
None	7.31	3.18	19
Catholic	6.96	2.62	97
Village	8.6	3.82	42
Catholic	8.0	3.57	32

Table 3.15 (Cont.)

	Mean	SD	N
Irish (Cont.)			
Town	8.5	3.24	41
Catholic	8.2	3.30	32
City	7.8	2.86	103
Catholic	7.7	2.70	85

Note: When subtotals were less than 20 categories, they were eliminated from the Table.

differences within the old stock population itself, those without any religious affiliation showed as little inclination as the immigrant ethnic groups to pursue educational goals.

For all the defects in the material and the lack of a sophisticated attitudinal scale to identify a future-oriented individual, there would seem to be a convincing case for using educational attainment and ethno-cultural membership and affiliation as a proxy. Both at the college level and in the general population, the data indicate that the modernizers were indeed pietistic Yankee Congregationalists or Scottish Presbyterians--but the traditionalists were more difficult to pin-point. Continental ethno-religious groups, particularly Catholics and Lutherans, were very much in evidence, but so were Scandinavian Lutherans, and most important, old stock Americans in town and country with no religious affiliation whatever.

Educational Attainment Within the Family

In concentrating on male head of household data, we have ignored the vital question of female education and educational attainment among other family members. Scanty evidence from the nineteenth century shows that American women were better educated than men.[23] In Iowa, this was also the case. For, although the correlation between a husband's educational level and his wife's was .69 showing fairly strong educational homogeneity, it was noticeable that in certain instances women retained an edge. In Table 3.16 women were more likely to be high school graduates than men (20.5% women and 15.4% men) and also were more likely to enroll in college than were their husbands. Men, however, were more inclined to graduate from college. While there are several plausible explanations

for this phenomenon, (wives were usually younger than their husbands, and therefore they would have had a greater chance to take advantage of greater educational opportunities) in an agricultural society with its rural schools intact, there was such a demand for teachers that some high school education, or better still, a high school diploma, was a desirable credential for most women. As one of the few choices of occupation open to middle class women was teaching, women were channeled into high school or often college by the prospect of certain employment after graduation. Men had far more varied career choices; and incentives for them to stay in school were not so great unless they had a professional career in mind. As the position of women was so bound up in teaching, and a later chapter is devoted to that purpose, let us turn to the evidence dealing with children of the sample.

Much sharper differences were evident in the levels of education between generations. There is evidence from rural sociology studies that in certain areas a real improvement was made in educational standards in the 1920s.* For example, in the Church of Brethren congregation, southwest of Iowa City, a community with a close resemblance to that of Orange township, more emphasis was placed on the modernization of homes than on the rationalization of local educational facilities. When the community was first studied just after World War I, all the children of the community attended rural schools, and only a handful had graduated from high school because secondary education was not available in the area. While there was indifference to educational improvement, there was certainly no direct hostility. A little over 50% of the respondents claimed they were in favor of higher taxes for consolidation of rural schools, although several added qualifications. Generally, the arguments

Table 3.16

Husband's Education and Wife's Education, 1925

	Grammar School	Some High School	Some College	%	N
Grammar School	2096	462	79	73.2	2637
Some High School	187	406	80	17.7	673
Some College	58	114	124	8.1	296
Total %	64.9	27.2	7.7	100%	
	(2341)	(982)	(283)	3606	

Source: Sample Data

against consolidation centered on transportation problems, but as in the communities we have already studied, there appeared to be little understanding of either the material or the intellectual benefits education could bring.[24]

Fortunately the same community was re-studied 10 years later in 1930 when each informant was asked to evaluate the greatest problems facing the farmer. The three most common replies concerned community cohesiveness, the problem of providing better roads, and farm price fluctuations. Furthermore, the long-term solution of the improvement of educational facilities for their children as a means for combatting the farm economic situation, was never mentioned. On the other hand, the decade of the twenties did see a marked improvement in the neighborhood. A consolidated high school had been built, and the majority of children were attending for at least two years.[25]

Universal high school attendance was by no means evident in 1925, but as far as primary school attendance was concerned our data shows that in whatever way the material is analyzed, about 96% of all eligible 6 to 14-year-olds spent at least 120 days in school in every type of community. As a consequence it would be more fruitful to measure grade retardation and drop-out from high school for the children of the sample, provided we are not restricted to those living at home.

In Table 3.17, the left hand panel compares the grade retardation of girls and boys in grouped age categories. Female children, like their mothers, showed a greater tendency to retain the correct grade than did males. Again, the same mechanism which was present in the earlier generation would still seem to be working. In the center panel, we compared the education of each father and the grade retardation of each eldest child. In other words we are simply asking whether educational

standards were being transmitted from father to child. For eldest children, where unfortunately the number of cases of high school fathers was dangerously small, the better educated parents did seem to transmit some kind of advantage. Those with high school graduate parents certainly had a better showing than students with only an elementary or a little high school education. In the final panel of Table 3.17, the performance of eldest children were compared in the different communities in Iowa. There is a reoccurring problem with numbers of cases in villages, trading centers and towns, but two points stand out. Rural youth showed a considerably better performance than did their fathers, and although their retardation rate was greater than in urban centers they did not disgrace themselves. Towns and cities, with more varied populations on which to draw, had more children in the correct grades than villages and trading centers. In general, though, these data point to a levelling-out of standards between communities, which suggests some improvement in rural education.

When we turn to the parental occupational differences when comparing the drop-out patterns for children aged 14 through 24, patterns were more discernable. (Table 3.18) As with the intergenerational data generated for their fathers the performance of eldest and second children had a class dimension. Among eldest children, over 50% of those who came from high status white-collar families were still in school. In less prestigious occupations a little over 35% of most children had remained in school for secondary education. This was an improvement over the previous generation. Farm children, on the other hand, continued to leave school before completing high school in great numbers. Furthermore a large percentage of eldest sons of farmers and renters were working

Table 3.17

Grade Retardation of Eldest Children

% Retarded

Age	Sex Differentiation			Father's Educational Level			Ecological Differentiation			
	All	M	F	HS Grad.	Some HS	No HS	1	2	3	4
7-9	39	41	37	36	37	39	48	58	39	29
10-12	50	51	49	30	36	55	43	45	55	48
13-15	48	64	33	42	50	68	48	31	54	63
16-18	68	73	63	49	88*	59	58	17	59	77

Note: Minimum base in each cell, 33. * Cell based on 25 cases.

1=Cities,2=Towns,3=Trading Centers,Villages,4=Open Country.

Source: Sample Data.

Table 3.18

% of Children Still in School,
and Father's Occupation,
1925

	Eldest Children			2nd Children		
	In Schl	Girls At Home	Farm Help	In Schl	Girls At Home	Farm Help
Professionals	58%	8%		74%	16%	
Managers	64%	20%		67%	27%	
Small Proprietors	56%	13%		56%	7%	
Wt Collar	38%	17%		46%	36%	
Skilled Craft	35%	24%		41%	25%	
Operators	37%	21%		35%	24%	
Laborers	36%	23%		35%	25%	
Fm Owners	29%	31%	39%	37%	30%	32%
Fm Renters	33%	25%	36%	27%	30%	37%
Fm Labs	23%	27%	50%	50%	17%	17%

on their fathers' farms than were in school. One other feature of this table is important. In most occupational groups, except professionals, a large number of daughters were living at home, but they apparently were not contributing to the family income, for few had jobs. Among second children, as was the case with eldest children, occupational status was a very clear indicator of whether or not a child would drop out of high school. In a similar way Blue-collar workers and farmers left school earlier and in greater numbers than students in high-status homes. In sum, these data tend to support the notion that American secondary education was class-based in the 1920s.[26]

Conclusion

During the first 25 years of the twentieth century, rural neighborhoods in Iowa were wrenched from their comparative isolation by technological innovations, such as the automobile, the radio, and the telephone. Change was so rapid that it was difficult for the average community to clearly define itself in the new cultural and technological atmosphere. This sense of role was made even more elusive in the difficult economy of the 1920s. It was hardly surprising that a rebirth of rural education ground to a standstill when the economic situation deteriorated. Education was never seriously offered as a solution to "the rural problem" as it was ills of "urban America" in the 1960s.

But it would be remiss to portray indifference and apathy as the watchwords of rural attitudes toward educational change. Support for the leadership of a vocal minority who spoke for "the dirt farmer" against the modernizers who supported rationalized agriculture, was

strong all over the State. The Iowa Homestead became the champion of the less affluent farmer and added a "populist" challenge to scientific agriculture from World War I onward. At the same time the farm paper was a keen supporter of May E. Francis, the state superintendent of public instruction elected in 1922 who determined to give every encouragement to those who wanted to retain the independent rural district. As a strong advocate of the one-room schoolhouse, Francis was investigated by state legislative committee when she was accused of blocking the promotion of pro-consolidation officials in 1924. Her retirement from state politics two years later, and the continued poor economic outlook tended to dampen down the issue.[27] However, it would seem obvious that below the surface, local control was, and would remain, an issue which would continue to stir Iowans.

If rural education continued to be a major headache for Iowa educators, bent on rationalization, urban standards gave no real cause for celebration either. As our material showed, primary school attendance in the 1920s was almost universal. It was at the secondary level that drop-out rates appeared to follow a class dimension. This finding seemed to agree with the contemporary data that was collected for scattered Iowa cities which showed that high-school attendance was largely the domain of children from white-collar homes.

Like the children of less affluent farmers, urban working-class students were also rarely touched by influences which took seriously that education was the passport to upward mobility.

In general, therefore, the subjects of this study lived in a transitional period, when for the majority who were not intent on professional careers, education was a luxury. For farmers, the prosperity of the first decades

of the twentieth century made most reluctant to invest in something as nebulous as education as a long term solution to their problems. In the towns and cities, working class indifference to education was also understandable. In a state such as Iowa, where so many urbanites were only one or two generations away from the land, the novelty of urban living bolstered by regular but modest wages, was enough to keep the majority satisfied. For them schooling was looked upon as a period of frustration to be tolerated before they could do out into the world to earn a living. Our material largely corroborated the Baldwin typology of a "modern" versus "traditional" approach to education, with high status Protestants being the only ethno-religious group with a clearly identifiable concern for educational attainment in all areas of the state. As Baldwin indicated the "Cedar Creekers" were in the vanguard in farm communities, and our evidence would suggest similar trends. The next three chapters will be devoted to this achievement process, and what factors were important for social mobility in a rural environment.

Notes - Chapter III

1. Clarence Ray Aurner, The History of Education in Iowa (Iowa City: State Historical Society of Iowa, 1914), I, p. 205.

2. See the speech by Henry A. Wallace, Senior, "Education for the Iowa Farm Boy," paper read before the Prairie Club of Des Moines, December 17, 1910, for a critical view of rural education in Iowa, and what should be done to improve standards.

3. Edwin R. Snyder, The Legal Status of the Rural High School in the United States (New York: Columbia University, Teachers College, 1909), pp. 179-180.

4. See Charles L. Robbins, "The Small Town and its School." University of Iowa Extension Bulletin, No. 348, September 1934; p. 11-12, for a discussion of the nomenclature and classification of communities in Iowa.

5. George Van Tungeln, "Social Survey of Orange Township Black Hawk County, Iowa," Iowa Agricultural Experiment Station. Bulletin No. 184; and Mary Campbell, "Orange Township Consolidated School, Black Hawk, County, Iowa." U.S. Bureau of Education, Rural Leaflet No. 30, November 1924.

6. R.C. Williams, "Type of High School District as a Factor in High School Attendance in Iowa," Iowa State Superintendent of Public Instruction, October 1938.

7. Rolland S. Wallis, "A Civil Survey of an Iowa Municipality," Engineering Extension Department, Iowa State College, No. 36, February 1926.

8. From an analytical standpoint this is important because much of our research is aimed at the period before 1925 when the state was more homogeneous and closer to its pioneer frontier beginnings. Thus the spectrum of individual experiences was narrower and the attrition of cases in some of the more intricate statistical operations in this study were not as damaging as they might have been in a state with a population with a more diverse background. Thus there would seem to be some justification for analyzing much of the data as a whole rather than comparing farm and urban populations.

9. August B. Hollingshead, Elmtown's Youth: The Impact of Social Classes on Adolescents (New York: John Wiley and Sons, 1949).

10. In 1918 the first public community college in the United States was founded in Mason City. However such a movement came too late to affect Iowans of our age groups.

11. See for example, Alice Haigh, "A Survey of the Consolidated Schools of Marshall County, Iowa," Unpublished Masters Thesis, The University of Chicago, 1923, for a convincing survey of the superiority of consolidated rural schools as opposed to one-room schools.

12. Although the majority of the foreign born were classified as having a country school education by the census takers, there is little indication of just what type of education this was. Standards in some parts of rural Europe might possibly have been higher than in the rural Midwest.

13. We have no data bearing on Sunday Schools, but it seems likely their effects were chiefly in the area of piety, morality, and community cohesiveness rather than cognitive skills.

14. For the vocational movement in one Midwestern city see Selwyn Troen, The Public and the Schools: Shaping the St. Louis System, 1838-1920 (Columbia: University of Missouri Press, 1975).

15. The only national educational returns from this period are estimates, and they indicate that Iowa was slightly better educated at the lower levels.

	0-4 Years	H.S.	College Graduate
Folger and Nam 1920 Estimates	22%	16%	3%
Iowa 1925	13%	15%	2%

On the other hand South Dakota in 1925 had 19% of her population high school graduates, and 78% with 8 years or less. See Folger and Nam The Education of the American Population (Washington, D.C.: Bureau of the Census, 1967), p. 132, and South Dakota, Fourth Census (Pierre, S.D.: State of South Dakota, 1926) p. 158.

16. Seymour Martin Lipset, and Reinhard Bendix, Occupational Mobility in Industrial Society (Berkeley and Los Angeles: University of California Press, 1959), p. 92.

17. G. E. Warren and K. C. Livermore, "An Agricultural Survey...of Tompkins County, New York," New York Agricultural Experiment Station Bulletin, No. 295, March 1911, p. 552.

18. E. H. Thompson and H. H. Dixon, "A Farm Management Survey of Three Representative Areas of Indiana, Illinois, and Iowa," U.S. Dept. of Agriculture Bulletin No. 41, January 1914, p. 38.

19. Everett W. Lord, The Relation of Education and Income (Indianapolis: Alpha Kappa Psi Fraternity, 1928), p. 31.

20. Donald Eugene Gorseline, The Effect of Schooling Upon Income (Bloomington: University of Indiana Press, 1932), p. 140.

21. For interesting insights into the "modern" outlook of East European coalminers in contrast to the "traditional" mores of old stock Americans in our sample township in Appanoose County see Alice and Staughton Lynd, eds., Rank and File; Personal Histories of Working Class Organizers (Boston: Beacon Press, 1973), Ch. 1.

22. That is, Presbyterians, Congregationalists and, occasionally, Episcopalians. The term "high status" merely refers to their denomination, not to their economic status. Doubtless much of

the high esteem enjoyed by these denominations can be attributed to general knowledge of their members' high average socio-economic status.

23. John Folger and Charles Nam, The Education of the American People, (Washington, D.C.: Bureau of Census, 1967).

24. Ella L. Kirkpatrick, The English River Congregation of the Church of the Brethren (Iowa City: State Historical Society of Iowa, 1930), pp. 59-60.

25. Ibid., pp. 95-96.

26. George S. Counts, The Selective Character of American Secondary Education (Chicago: University of Chicago Press, 1922).

27. Richard N. Smith, "The Iowa Department of Public Instruction," in Jim D. Pearson, and Edgar Fuller, eds., Education in the States: Historical Development and Outlook. (Washington: NEA, 1972), p. 415.

Chapter IV

Occupational Mobility in the Rural Midwest

The nature of occupational mobility in rural America has seldom interested historians. They have long been content with repeating or repudating Frederick Jackson Turner's frontier hypotesis as America's central mobility process. However they have rarely examined the evidence systematically.[1]

Sociologists have largely lost interest in the question, partly due to the diffuculty in measuring farmers' status, and partly because of the greater fascination of studying underdeveloped societies where the gap between highly traditional subsistence agriculture and the modern urban sector is so dramatic. Yet the fact remains that over the last two centuries the majority of Americans were either farmers or urbanites only one generation removed from the land. In this chapter we will examine the broad contours of occupational change from father to son, of intragenerational change in individual lives, and the correlates of mobility with education and religion. We will also measure the influence of industrialization (i.e., the shift from an agricultural to a white collar and blue collar labor force), leaving to chapter 6 a consideration of urbanization (i.e., the shift in population from farms to towns and cities). The agricultural ladder, or process whereby farm boys became farmers, deserves special attention, and we will also look at the question of who attended college in rural Iowa.

The completed fertility of Iowa farm women over 45 in 1910 was 4291 children per thousand, or the equivalent of 1547 surviving farm sons per thousand fathers. Since most of the available farms had been established by 1880, and nearly all by 1900, the natural growth of the Iowa population

could not be absorbed by agriculture unless families were willing to subdivide their holdings into smaller and smaller and less efficient parcels. That solution was unacceptable, so the surplus farm boys had to either search for land elsewhere or move to towns and cities.[2]

Our intergenerational evidence comes from tracing our 1925 sample of men to their family of origin in 1915, 1900 or 1880. (See Methodological appendix.) While certain losses resulted from the failure to locate 50% of these families, it is unlikely that an unbiased sample, if such could be constructed, would differ significantly from what we found. It must be remembered, however, that the group of "fathers" is quite artificial. Some of the sampled sons in 1925 were young men with fathers alive and eligible to be in the sample themselves. Other sons were old men whose fathers had died at Gettysburg sixty years before. Furthermore, a father of five Iowa sons was five times as likely to be represented as the father of one; fathers of all girl families never could appear. The latter bias is unimportant, but the former is not. Parents who deliberately decided to concentrate their resources on fewer children--a modern characteristic--are definitely underrepresented. This biases the totals in favor of farmers and blue collar workers. As shown by Table 4.1, giving the completed fertility of Iowa women over 45 in 1925 by occupation. In the next chapter we will statistically eliminate these biases by controlling for father's occupation and family size.

Inter-generational flows

In 1925, 72% of the men were sons of farmers. The majority, 71% were themselves farmers, 13% were white collar workers, and 17% were blue collar workers. Of the 18% who were sons of blue collar workers, 63% were themselves in blue collar jobs, 23% had moved up to white collar

Table 4.1A

Fertility and Survivorship by Occupation
Native White Wives Aged 40-55 in 1910, by Husb. Occupation

Husband's Occupation	Children Ever Born*	Sons Surviving to Age 35
Professional	3130	1128
Manager	3455	1246
Low White Collar, Clerical	3181	1147
Craftsman	4045	1458
Unskilled Laborer	4722	1702
Farmer, Owner and Tenant	4929	1777
Farm Laborer	4807	1733
All	4291	1547

* Per 2000 Midwest Native White Women.

Table 4.1B

Grown Sons of Iowa Farmers
in 1910, immigrants included

Fathers born about	# of Sons Surviving
1869	1719
1858	1883
1853	2116

Sources: U.S. Bureau of the Census, Population: Differential Fertility 1910 and 1940, Fertility by Duration of Marriage (Washington: 1947),p.202, and Fertility for States and Large Cities(Washington, 1943),p.147. Survival rates based on model West, level 14, male life expectancy at birth of 50 years, 70% survival to age 35. Ansley J. Coale and P. _ Demeny, Regional Model Life Tables and Stable Populations (Princeton: Princeton University Press, 1966),p.15.

status, and 14% were operating farms. Only 10% were sons of white collar men, of whom 66% were also in white collar jobs, 19% had dropped to blue collar status, and 15% were operating farms in 1925. (See Table 4.3) Thus, 70% of the sons of all ages in 1925 reported the same general status group as their father, and 30% had made a significent switch.[3]

When we apply more refined job codes, (Table 4.3), the extent of intergenerational occupational inheritance narrows a great deal. Dividing farm fathers into owners, renters and laborers, we find that only 36% of their sons were in identical classifications in 1925. Dividing blue collar fathers into skilled, semiskilled and unskilled subgroups, only 26% of their sons were in the identical subgroup. With our categories of white collar fathers, a mere 12% of their sons were in identical categories. Overall, with ten groupings, less than a third--32%--of the sons had "inherited" their father's job. Obviously, if we used fewer job categories, the rate of "inheritance" would drop even lower for the non-farmers.

Outside of agriculture, it is clear that specific job skills a father might teach his son were of minor importance in rural America. Generalized skills, like being handy with tools or keeping accounts, would have been more useful for the sons, but the overall impression is that job skills had to be acquired outside the family for two thirds of the sons.

Turning Tables 4.2 and 4.3 around (See 4.4 and 4.5) we can see how heterogeneous the backgrounds were fed into various status and job groupings. The farmers nearly all (93%) came from farm families. This of course followed from the shortage of farms to go around, but it also implied that technical or intellectual skills developed by the urban sector did not directly flow into agriculture. If farmers wanted to use urban skills, then an urban person, say a salesman or teacher or farm

Table 4.2

Intergenerational Mobility: Outflow

Father \ Son	White Collar	Farm	Blue Collar	N
White Collar	66%	15%	19%	209
Farm	13	71	17	1482
Blue Collar	23	14	63	375
N				2066

Source: Sample Data.

Table 4.3
Intergenerational Mobility Outflow
Iowa, 1925
(read across)

Father's Occupation	Son's Occupation										
	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm Renter	Fm Lab	N
Prof	28	12	4	16	0	8	12	12	8	0	(25)
Mgr.	13	29	20	7	7	4	6	9	6	0	(55)
Minor Prop	8	7	31	20	7	6	6	4	11	1	(107)
Wt Collar	6	0	33	28	6	17	7	0	0	0	(18)
Skilled Craft	4	2	13	11	33	16	11	4	6	1	(144)
Semi Skilled	2	2	5	10	15	33	9	12	5	0	(61)
Lab.	1	2	8	10	17	21	18	3	10	4	(167)
Fm Owner	4	2	6	2	3	5	6	35	35	3	(1199)
Fm Renter	2	1	3	6	3	9	6	18	39	6	(282)
Fm Lab	8	8	0	0	0	17	0	0	25	42	(12)
All	3.9%	2.8	8.0	5.5	7.1	8.3	9.4	24.0	27.9	3.0	100% 2070

To read this table: row 1 represents all 25 sons in 1925 whose father was a professional. 28% of these sons were professionals, 12% were managers, etc.

agent had to teach them either in person or through mechanisms like farm magazines and country fairs.

Iowa's working class population was recruited almost equally from the farms (47%) and from blue collar households (8%). Only 8% came from white collar origins, and these were mostly sons of small shopkeepers who probably were barely holding on themselves. There was a certain amount of downward white collar to blue collar mobility in Iowa, as everywhere, but the impact of this on the composition and, particularly, the intellectual, cultural and political life style of the working classes probably was overwhelmed.

The most fascinating discovery from Tables 4.4 and 4.5 is the heterogeneity of the middle class. Only a third of the white collar sons came from white collar families; 46% had farm origins and a remarkably large proportion, 21%, had climbed from the working class. Fully a third of the clerical group (column four of Table 4.5) had blue collar fathers, and even 10% of the professionals. The explanation for this result (which no one seems to have commented upon before) is not so much high rates of upward mobility but the fact that the middle class population was growing so fast--and had relatively low fertility--that recruits had to come from either farm or workers' families. As we shall see, education was the key ingredient that made entry into the middle class ranks possible.[4]

Since numerous studies have demonstrated that upwardly mobile sons take on the values and orientation of the class of destination,[5] we can suggest that diversity of origin does not imply a cultural variance within the middle class. On the other hand, the middle class had firsthand knowledge of the conditions of all layers of society. In a word, their cosmopolitan outlook was reinforced by experience, while the relatively more parochial and localistic outlook of the workers and farmers was

Table 4.4

Intergenerational Mobility:Inflow

Father	Son		
	White Collar	Farm	Blue Collar
White Collar	33%	3%	8%
Farm	46	93	47
Blue Collar	21	5	45
N=	411	1132	523

Source: Sample Data.

Table 4.5

Intergenerational Mobility Inflows
Iowa, 1925
(read down)

Father's Occupation / Son's Occupation	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm Renter	Fm Lab	All
Prof	9	5	1	4	0	1	2	1	0	0	1.2%
Mgr	9	28	7	4	3	1	2	1	1	0	2.7
Minor Prop	11	12	20	18	5	4	4	1	2	2	5.2
Wt Collar	1	0	4	4	1	2	1	0	0	0	0.9
Skilled Craft	8	5	12	14	32	13	7	1	2	2	6.9
Semi Skilled	1	2	2	5	6	12	6	1	1	0	2.9
Lab	1	5	8	14	20	20	22	2	3	10	8.1
Fm Owner	53	35	42	23	28	31	39	83	73	52	57.9
Fm Renter	6	7	6	14	6	15	19	10	19	27	13.6
Fm Lab	1	2	0	0	0	1	0	0	1	8	0.6
N=	(80)	(58)	(165)	(114)	(148)	(172)	(194)	(498)	(579)	(62)	100% (2070)

To read this table: Column 1 represents 80 sons who were professionals in 1925; 9% had fathers who were professionals in 1925, 1915 or earlier; 9% had fathers who were managers; 11% had fathers who were minor proprietors, etc.

less lilely to be tempered by men with more varied backgrounds.

Once a son entered a particular status or occupational grouping, he was unlikely to change. That is, the degree of intra-generational movement was small. Comparing men's occupation in 1915 and 1925, from 80 to 95% remained in the same broad grouping; the only dramatic trend (Tables 4.6, 4.7) was for farm renters to become owners (27% did so), and for farm laborers to become renters (43%) or owners (21%). Narrowing the study to men aged 28 to 45 in 1925, and looking at their job in 1915, (Tables 4.8, 4.9) shows comparable patterns. Some men shifted categories, as they learned more about their own talents and society's needs. By the time men reached their mid-30's, the cases of dramatic shifts were becoming fewer, though the option of moving elsewhere in search of more money, less pressure, more fulfillment or a better climate remained available.

Measuring the Impact of Industrialization

Since some of the observed integenerational mobility was produced by a shift in Iowa's occupational supply, away from farmwork in favor of blue and, especially white collar jobs, it would help understanding if the effects of these macro shifts could be statiscally eliminated. That is, what would intergenerational mobility have been if there had been no macro shifts, but if the individual propensity of sons to follow or move out of their fathers' groupings had remained the same. A recently developed statistical technique makes possible a specific answer to this counter-factual question.[7]

Table 4.10A, a simple recasting of Table 4.3, shows only the marginal percentages. Thus, 4.0% of the fathers were high white collar (professional

Table 4.6
Occupation 1915 by Occupation 1925
(read across)

Occupation 1915	Occupation 1925											
	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm Renter	Fm Lab	Retd	X N
Prof	95	0	0	2	0	0	0	2	2	0	0	2.4(57)
Mgr	2	80	4	2	2	0	0	5	4	0	2	2.4(56)
Minor Prop	1	6	81	1	3	2	1	3	1	0	3	7.7(180)
Wt Collar	2	6	11	65	2	6	2	2	5	0	0	5.3(124)
Skilled Craft	0	1	4	1	81	6	2	3	2	1	1	9.5(222)
Semi Skilled	0	1	2	4	3	75	3	2	6	1	3	6.2(145)
Lab	0	0	2	1	4	9	69	3	9	2	2	8.0(186)
Fm Owner	0	1	2	0	1	0	2	80	15	0	0	26.2(620)
Fm Renter	0	1	1	1	1	2	4	27	63	0	0	16.2(378)
Fm Lab	0	0	2	1	1	2	9	21	43	22	0	8.1(188)
Sons of Farmers	1	0	0	2	0	4	4	10	75	4	0	7.5(176)
All	2.6%	3.0	8.4	4.4	9.0	7.2	8.1	29.1	25.2	2.3	0.8	100% N = 2332

Table 4.7
Occupation 1925 by Occupation 1915
(read down)

Occupation 1915	Occupation 1925											
	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm Renter	Fm Lab	Retd	All
Prof	89	0	0	1	0	0	0	0	0	0	0	2.4%
Mgr	2	64	1	1	1	0	0	0	0	0	6	2.4
Minor Prop	2	16	75	1	2	2	1	1	0	0	28	7.7
Wt Collar	3	10	7	79	1	4	2	0	1	0	0	5.3
Skilled Craft	0	1	4	2	86	8	2	1	1	2	11	9.5
Semi Skilled	0	1	2	6	2	65	2	0	1	2	28	6.2
Lab	0	0	2	2	3	10	68	1	3	8	22	8.0
Fm Owner	0	4	6	0	1	1	5	73	16	0	0	26.2
Fm Renter	0	3	3	2	2	4	8	15	41	2	6	16.2
Fm Lab	0	0	2	2	1	2	8	5	13	72	0	8.1
Sons of Farmers	3	0	0	4	0	5	4	3	24	15	0	7.5
N =	61	70	195	102	210	168	188	680	588	53	18	100% 2332

Table 4.8: Intragenerational Mobility
First Job by Occupation in 1925
Men Aged 28-45
(read across)

First Job	Occupation 1925										
	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm Renter	Fm Lab	N
Prof	83	0	0	6	0	0	0	6	6	0	(18)
Mgr	0	75	8	8	0	0	0	8	0	0	(12)
Minor Prop	2	4	86	2	0	4	0	2	2	0	(56)
Wt Collar	3	6	11	64	2	5	0	2	8	0	(64)
Skilled Craft	0	1	6	2	73	7	4	2	5	0	(85)
Semi Skilled	0	2	0	5	7	70	3	0	12	2	(60)
Lab	0	0	1	1	5	12	57	5	14	5	(84)
Fm Owner	0	0	4	0	0	0	1	91	4	0	(96)
Fm Renter	0	0	2	1	1	1	4	29	62	0	(226)
Fm Lab	0	0	3	1	2	1	6	24	47	18	(114)
Sons of Farmers	0	0	0	0	0	2	5	17	74	2	(58)
All	2.1%	2.1	8.4	6.1	8.6	7.8	8.2	22.8	31.0	3.0	100% N = 873

Table 4.9
Occupation in 1925 by First Job
Men Aged 28-45

First Job	Occupation 1925										
	Prof	Mgr	Minor Prop	Wt Collar	Skilled Craft	Semi Skilled	Lab	Fm Owner	Fm. Renter	Fm Lab	All
Prof	83	0	0	2	0	0	0	1	0	0	2.1%
Mgr	0	50	1	2	0	0	0	1	0	0	1.4
Minor Prop	6	11	66	2	0	3	0	1	0	0	6.4
Wt Collar	11	22	10	77	1	4	0	1	2	0	7.3
Skilled Craft	0	6	7	4	83	9	4	1	2	0	9.7
Semi Skilled	0	6	0	6	5	62	3	0	3	4	6.9
Lab	0	0	1	2	5	15	67	2	4	15	9.6
Fm Owner	0	0	6	0	0	0	1	44	2	0	11.0
Fm Renter	0	6	6	4	3	4	11	33	52	0	25.9
Fm Lab	0	0	4	2	3	2	10	14	20	77	13.1
Sons of Farmers	0	0	0	0	0	2	4	5	16	4	6.6
N	(18)	(18)	(73)	(53)	(75)	(68)	(72)	(199)	(271)	(26)	873/100%

and managerial), compared to 6.7% of the sons; 6.0% of the fathers held low white collar jobs (petty proprietors and clerks) compared to 13.5% of the sons. Simply put, the change in the marginals represented industrialization. If the supply of jobs the sons filled had the same distribution as the fathers, then 4.0% of the sons would have been high white collar, 6.0% low white collar, etc., as shown in the bottom row of Table 4.10A. The observed outflow rates, taken from a recast of Table 4.3, appear in 4.10B; these rates are a combination of macro (structural) and micro (Individual) rates. The hypothetical rates shown in Table 4.10C are the "standardized" rates of Table 4.10B after statistical adjustment to remove the macro effects. They show just the micro or individual rates we are interested in. To highlight the importance of this adjustment, Table 4.10D shows the ratio of the corresponding rates in 4.10B to 4.10 C. That is, for the upper left cell, 40% ÷ 28% = 143%. Table 4.10E shows the percentage difference between 4.10B and 4.10C that is, for the upper left cell, +12% = 40% - 28%.

The interpretation of 4.10C is dominated by the farm columns, but there are surprises. Nearly half of the progeny of the upper middle class (row one) would have become farmers if Iowa had not changed, compared to only 27% of the lower middle class and 29% of the workers. This indicates an unexpectedly close connection between Iowa's urban and rural elites; we will explore this further when we examine the role of college education for farm boys. On the other hand, the ties between farming and non-elite urban Iowa were unexpectedly weak. The reason for that, as we shall see in detail later in this chapter, was the high cost of obtaining a farm. Put in terms of Turner's classic formulation, there was no way farming in early 20th century Iowa could have served as a "safety valve" for either unhappy or ambitious sons of workers and clerks.

Table 4.10A

Observed Rates

Fathers	Sons					
	Hi W.C.	Low W.C.	Bl Col.	Farm O	Farm Renter or Lab	Total
High White Col.						4.0
Low White Col.						6.0
Blue Collar						17.9
Farm Owner						59.6
Farm Renter Laborer						12.5
Observed	6.7	13.5	24.9	24.1	30.9	100%
Adjusted (Standardized)	4.0	6.0	17.9	59.6	12.5	100
						N=2966

Table 4.10B
Observed outflow rates (across)

Fathers	Sons					
	Hi W.C.	Low W.C.	Bl Col.	Farm O	Farm Renter or Lab	Total
High White Col.	40%	25%	17%	12%	6%	100%
Low White Col.	14%	52	21	3	10	100
Blue Collar	4%	19	62	5	9	100
Farm Owner	5%	8	14	34	38	100
Farm Renter Laborer	3%	9	27	15	45	100

Table 4.10C

Fathers	Standardized Outflow Rates (across) Sons					
	Hi W.C.	Low W.C.	Bl Col.	Farm O	Farm Renter or Lab	Total
High White Col.	28%	10%	12%	45%	3%	100
Low White Col.	14%	34	23	18	9	100
Blue Collar	3%	11	59	23	6	100
Farm Owner	2%	2	6	77	13	100
Farm Renter Laborer	2%	2	18	54	24	100

Source: Sample Data

Table 4.10 D

Ratio of Observed Outflow Rates to Standardised Rates

Father	Son: High WC	Son: Low WC	Son: Blue	Son: Farm Own	Son: Farm/Rent Labor
High White Collar	143	250	142	27	200
Low White Collar	100	153	91	17	111
Blue Collar	133	173	105	22	150
Farm Owner	250	400	233	44	292
Farm Renter, Laborer	150	450	150	28	188

Table 4.10 E

Difference in Outflow Rates Observed - Expected of no Urbanisation

Father	Son: High WC	Son: Low WC	Son: Blue	Son: Farm Own	Son: Farm Other	Proportion Shifts due Urbanisati
High White Collar	+12	+15	+ 5	-33	+ 3	32%
Low White Collar	0	+18	- 2	-15	+ 1	18%
Blue	+ 1	+ 8	+ 3	-18	+ 3	21%
Farm Own	+ 3	+ 6	+ 8	-43	+25	43%
Farm Other	+ 1	+ 7	+ 9	-39	+20	39%

Source: Sample Data

The importance of increased industrialization can be gauged in Table 4.10D. A ratio between 70 and 140 can be interpreted as meaning macro changes had only slight impact on individual mobility. Thus, the movement of lower middle class sons (row two) into upper middle class (= 100) or blue collar (= 91) jobs was unaffected by industrialization. Likewise, the movement of workers sons (row three) to the upper middle class (= 133) or their retention in blue collar status (= 105) was unaffected. As the last column of table 4.10E (the sum of positive values in each row) shows, in general industrialization had the least impact on the mobility of the lower middle class and the workers. The impact on farmers was, of course, very great. Notice that industrialization seemingly increased the ranks of farm renters and laborers. This was largely an artifact of the age differential between sons in 1925 and their fathers whenever the latter were observed, usually in 1915 or 1900. It reflects the fact in Table 4.10A that 30.9% of the sons were renters or laborers, compared to only 12.5% of their fathers. However, there was also a long-term increase in the proportion of farmers who were renters.

Education and Social Mobility in Urban Iowa

Thus far we have emphasized the continuity in status between generations: most sons resembled their fathers, particularly if the impact of growing industrialization is eliminated. Now we will look at how important a person's education was in fixing his status relative to his father. Begin with sons of middle class origins, that is, those whose fathers held a white collar job. Table 4.11A reminds us that in all 66% of these sons retained white collar status, 19% slipped to blue collar, and 15% shifted to farm work.

Table 4.11 A

Sons of the Middle Class: Status by Education
(read down)

Son's status	Son's Education: Primary	Some High School	High School Diploma	Some College	All
White Collar	45%	63%	73%	86%	66%
Blue Collar	35	13	21	4	19
Farmer	20	24	6	10	15
N	(75)	(38)	48	51	(212)

Note: This table includes all sons whose fathers were in white collar jobs

Table 4:11 B

Sons of the Middle:Class: Observed to Expected Ratios

Son's status	Son's Education: Primary	Some High School	High School	Some College	All
White Collar	68	95	111	130	100
Blue Collar	184	68	111	21	100
Farmer	133	160	40	67	100

Note: Each entry is the ratio of the corresponding entry in table 4.13 A to its row sum. Thus in the upper left cell, 68% = 45% ÷ 66%

Source: Sample Data

However, sharply varying patterns emerge when the son's education is considered. Only 45% of the sons with a primary education (no high school at all) maintained their middle class status; over a third (35%) dropped to blue collar jobs, and the remaining 20% became farmers. Sons with some high school did far better, with 63% holding white collar jobs in 1925. A high school diploma was the route to continued middle class status for (73%) of those with 12 years of schooling, and 86% of those with college experience. Indeed, of the 51 men in 1925 of middle class origins and some college, only two were found working in blue collar jobs.

Another way to look at this is to "expect" that each group of middle class sons would divide 66-19-15 among white, blue collar and farm jobs, and to compute the ratio of observed to expected proportions in each educational group. If education had no effect on the status of these sons, the ratio would be 100.[8] The result is Table 4.11B, which shows that poorly educated boys become middle class at a rate only two-thirds (68%) of the expected value (i.e., 45% ÷ 66% = 68%), but are far more likely then expected (184 and 133) to become blue collar workers or farmers. Some high school experience is enough to reduce downward mobility, but it increased the likelihood of becoming a farmer (warning: the number of cases here is dangerously small). High school diploma holders clearly avoided farming, but were slightly more likely than expected (111) to become blue collar workers.

The same sort of analysis for offspring of blue collar families (Table 4.12A) highlights even more dramatically the importance of education in achieving middle class status. A mere 14% of the least educated blue collar progeny was middle class in 1925, compared to 36% of those with some high school and a small majority, 53%, of sons with a high school

Table 4.12 A

Sons of the Working Class: Status by Education (read down)

	Son's Education			
	Primary	Some High School	High School or more	All
Son's status				
White Collar	14%	36%	53%	23%
Blue Collar	69	55	40	63
Farmer	16	9	8	14
N	(264)	(67)	(53)	(375)

Table 4.12 B

Sons of the Working Class: Observed to Expected Ratios

	Son's Education			
	Primary	Some High School	High School or more	All
Son's status				
White Collar	61	156	230	100
Blue Collar	110	87	63	100
Farmer	114	64	57	100

Source: Sample Data

diploma (or, uncommonly, some college). Few blue collar sons went into agriculture, and those wre the least educated ones. The modernizers who held out the promise of middle class status for youth who attended high school could not overcome entirely the effects of family background, but clearly there was some validity to the promise.

Social Mobility in Agriculture

Happily, we are able to describe more fully the process of social mobility in farm families thanks to more cases, more data on wealth, and evidence from early sociological studies. Overall, 71% of the farmers' sons in 1925 were farmers, 13% had white collar jobs, and 17% blue collar jobs. Tables 4.13A and B prove convincingly that high school and college education was the route to a white collar job. Farm sons with college experience were four times (408) more likely to take white collar jobs as the average farm son. Doubtless the farmers realized this. A glance at the number of cases in each educational category serves as a reminder that very few farm boys ever entered high school, let alone college.

Folk stories abound about the poor farm boy who devotes himself to his studies (while always doing his chores), whose parents scrimp and save, and who finally wins a scholarship to college and eventually emerges rich and successful. Clifford Drury, for example, grew up on a farm in Buena Vista County in the early years of this century. Although public schools were free, his parents had to spend money so Clifford and his sister could board ten miles away in the town of Early to attend the small high school there.[9] Eventually, he went on to college, became a minister, and recorded his memoirs.[10] The stories are true enough, but

Table 4.13 A

Farmers' Sons: Status by Education
(read down)

Son's Education

	Primary	Some High School	High School Diploma	Some College	All
Son's status					
White Collar	6%	19%	24%	53%	13%
Blue Collar	19	18	14	5	17
Farmer	75	64	62	43	71
N	(1096)	(188)	(91)	(131)	(1482)

Table 4.13 B

Farmers' Sons: Observed to Expected Ratios

Son's Education

	Primary	Some High School	High School Diploma	Some College	All
Son's Status					
White Collar	46	146	185	406	100
Blue Collar	112	106	82	29	100
Farmer	106	90	87	61	100

Source: Sample Data

how typical were they? What sort of farm boy actually went to college.

To find out, we sampled 273 alumni of Iowa State College in 1925, and tracked down their parents.[11] With its central location and strong engineering, agriculture and home economics programs, I.S.C. attracted students from across the state. Two thirds of the students dropped out before getting a degree, but presumably the time they did spend in higher education had some impact on their lives. In particular, the fast growth of agricultural science in the era demanded men to disseminate the findings.

Roughly two-thirds of these Iowa State alumni grew up on farms in the open country, while a third of them came from villages of under 1,000 population. But their interest in higher education should not conjure up the image of poor farm boys struggling against all odds to work their way through college. The majority came from homes which were above average socio-economically. An occupational profile of fathers showed that 69% were farmers--90% of whom were farm owners--22% white-collar workers (the majority of them were village merchants), and only 5% were blue-collar workers. The educational backgrounds of the parents was minimal: fully 71% of them had only a country school education. Thus for the majority of farm children it was obviously not their parents' own educational attainment which made them potential college graduates. Moreover, the profile of the religious affilation of these parents was not very different from the general population. A large number of farm parents had no religious affilation (37%), while the most educationally oriented group in the general population, high status Protestants, showed only moderate strength. Catholics were severly underrepresented. This might have been because Iowa Catholics with farm backgrounds preferred to attend seminaries or Catholic liberal arts colleges. The lack of Catholic

Catholic women enrollment was surprising in view of their representation among the teaching profession in Iowa. With the notable exception of Irish, however, ethnically, this college population was reasonably representative of the state's ethnic makeup. The sample had almost exactly the correct proportion of Germans, and of old-stock alumni.

Are there any further indicators which might suggest why these farm children went to college, and others did not?[12] Although sampling problems, and the difficulty of locating alumni in certain counties severely restricted generalizations, one hypothesis might be that the economic conditions in the counties might have affected attendance. In this sample for instance, the two southern Iowa counties of Union and Appanoose produced no traceable rural alumni, although Decatur, and Jackson, both poor counties,[13] were well represented. Individual parental characteristics however, were certainly more useful predictors of college attendance. As was suggested before, parents of these alumni were considerably better off than the general population. Both in terms of 1914 earnings, and in the valuation of the parental farms, they were better established than the average farmers.

While it was somewhat surprising that proportionately more women matriculates graduated from Ames than did men, this was due to the occupational opportunities for women. With school teaching requiring cast iron credentials in a system of any repute, rural women had the incentive to finish their course work and obtain degrees. On the other hand, among men an unexpected pattern showed that students from more affluent homes were more likely to drop out of college than graduate. This might possibly have been caused by the fact that farmers' sons from economically secure homes intended to stay in farming, and saw no great urgency to finishing four years of college; others may have transfered to another college

Undoubtedly, except for students who went to Iowa State for a professional education (to become engineers, agricultural research workers, or veterinarians), the majority went to college as much for the social benefit, as for the academic rewards. College was for them, a place where important contacts were made for life, rather than where the learning experience counted for much. At Ames, students from farm backgrounds met youth from other environments for the first time, and this in turn brought about the convergence of rural and urban Iowa.

The Agricultural Ladder

The rural counterpart of that urban escalator, social mobility, was the agricultural ladder.[14] Descriptively, it refers to the process whereby a poor young man could eventually become a landowner by starting as a farm laborer, saving enough to buy equipment and enter the tenant class, then save enough profits to at last purchase some acreage. Ideologrally, it was the counterpart to the Horatio Alger theme of rages to riches in the city. Studies of the movement of land ownership in the late 19th century have been inconclusive on the exact details of the process, though it is clear that before 1890 the great majority of farmers did own their land.[15]

In general there were two good reasons why agriculture was less open in the 20th century than the last two decades of the 19th century. First, there was little frontier land available for corn belt farmers, and second the farm population was exceedingly fertile. Where the land was productive, as in Iowa, competition was intense, and real estate was a prime investment. Was it any wonder than that Iowa's percentage of tenant farmers increased from 24% in 1880 to 35% in 1900, 42% in 1920 to 50% in 1930![16]

Indeed of all states outside the south, Iowa's 1930 percentage of tenants 4.27
was the highest. But unlike other states, and certainly contrary to the situation in the black belt, Iowa's apparent lack of openess was caused by the high price of land. With the best land selling at $500 per acre, or more, by 1915 only a select group could afford down payments. In addition, the prosperity of agriculture and the steep rise in land prices before 1920 allowed many Iowa farmers to retire to the local trading center, where they could supervise their land holdings and bank accounts.

By the 20th century the slow climb up the agricultural ladder, took considerably longer than in the 19th century. Owners, therefore, were more mature, and in many cases were over 50 before they began paying off their mortgage debts. In a study conducted in Wisconsin, it was found that prior to 1882, half of the farmers between the ages 21 and 25 became owners. On the other hand, between 1912 and 1922 only one-fifth of this age group acquired their own land.[17]

What then was the reality of the farm mobility situation at the local level? A number of scholars have somewhat arbitrarily identified 1920 as the year when the system of farm mobility took a sharp turn downward. In Iowa, 1920 was certainly a year which symbolically represented the division between the good times and the deflationary years which followed. But there is little doubt that "blockages" in the agricultural ladder existed before then. A student of California farm life has suggested that the 1920's saw a change to a more hierachical rural social structure with the community he studied having a clear dividing line between farm owners, "the haves" and farm renters, "the have nots".[18] In another study done in the late 1930's in Irwin, a community included in our sample, it was suggested that while the depression and a period of farm recession before 1929, tended to disrupt working of the agricultural ladder, hard times also caused a leveling and democratizing of social

structure of the farm and village population.[19] 4.28

Spillman's own research carried out before 1920, revealed that only 20% of all farmers in his sample actually climbed 4 rungs of the ladder: family worker, hired hand, tenant, full owner. Indeed, the majority, 34%, inherited their land directly from their fathers or other relatives and went straight into ownership from working without pay on their fathers' farm.[20] An intensive study in Cedar County, Iowa, published in 1923, obtained rather similar results. Although 29% of all farm owners had at one time in their lives been through all the stages in the agricultural ladder, another 50% had leaned very heavily on kin ties and inheritance either in own, or in being given a farm rent free by a relative. In Cedar County there was still some evidence to show that the seeds of upward mobility could be sown by saving income. The hired men in the study who reported their savings, managed to accumulate an average of $918, and as tenants a great number saved over five thousand dollars. Perhaps as impressive was that 54% of farmers had no debts as their first tenancy.[21] On the whole though, the scanty Iowa and national evidence tends to indicate that the agricultural ladder had lost much of its relevance by the second decade of the twentieth century.

To attack this question in our study we depended on the experience of two groups for insights. First, of the 188 men who were living on their father's farm as unpaid laborers in 1915, only 10% had become farm owners by 1925, whereas 75% were renters. Among those who were hired hands in the 18-25 age group, that is paid members of the labor force on their fathers farms, or working for others, 24% were owners in 1925, 47% were tenants, and 18% remained hired laborers. (See table 4.8)

In contrast those who were born within five years of 1880 came to maturity at the high tide of the Golden Age of agriculture. On average they not only accumulated more land than their fathers, but due to the steep inflation of land prices had shown considerable economic mobility as well. (Table 4.14). On balance, though, for the younger members of the sample, the data does suggest that the farm slump of 1920/21 did take its toll. Among those aged between 28-45 in 1925, 11% were farm owners in 1915, by 1925 their ranks had doubled to 23%. But the ranks of farm renters were also increased from a total of 26% to 31% ten years later.

Without question the surest way of becoming a farm owner in 20th century Iowa was for an individual to inherit land outright, marry an heiress, or inherit with siblings and pay off their share of the inheritance over a period of years. In this regard, birth order did not bring any particular advantage to the farmer as far as the amount of land owned was concerned. For although only children and elderly sons did have slightly more land than those of middle positions in the birth order, this was partly a result of age and differences were not significant. (Tables 4.15, 4.16)

Open country mobility in the 20th century began to resemble more and more closely a form of small business enterprise with an apprenticeship period, and inheritance system which was very similar. An occupational ladder of sorts did function in a situation where a son worked on his father's farm as an unpaid laborer, and then inherited the property. Thus in the Corn Belt in middle of the Depression, 61% of all farmers reported that they had risen in status, and two-thirds of all farmers in the same study reported inheritance of property.[22] Obviously there was some upward mobility on Iowa farms in the 20th century, but increasingly it became geared to an inheritance system of intertwined sibling transactions.

Table 4.14
Father's Farm Value (1880) and Son's Farm Value(1915)

Father's Value	Son's Value: 85-4999	5000-19999	20000-39999	40000+	Total
0	1	2	0	0	3 1.7%
1-249	1	2	0	1	4 2.3
250-4999	36	48	17	3	3 59.8
5000-19999	20	16	21	5	62 35.6
20000+	0	0	1	0	1 0.6
Total	58 33.3	68 39.1	39 22.4	9 5.2	174 100%

Gamma=.225, p=.056

Father's Acreage (1880) and Son's Acreage (1925)

Father's Acreage	Son's Acreage: Below 60	61-160	161-320	320+	Total
None	4	19	7	0	30 24.4%
1-60	10	40	21	1	72 58.5
61-160	2	12	6	1	21 17.1
Total	16 13.0	71 57.7	34 27.6	2 1.6	123 100%

Gamma=.126,p=.866

Source: Sample Data

Table 4.15

Acreage 1925 by Birth Order(acres)

Order of Birth	Acres	S.D.	N
Eldest Child	159.8	120.7	87
Eldest Son	148.0	78.1	47
Youngest Son	147.5	133.0	64
Middle Son	153.6	104.0	85
Only Child	168.8	86.0	11
Second Son	148.9	85.0	63

F=0.18, N.S.

Source:Sample Data.

Table 4.16

Farm Values,1915 By Birth Order

Birth Order	Mean Farm Value	S.D.	Mean Livestock Value	S.D.
Eldest Child	$15317 (119)	$13785	$2457 (142)	$2015
Eldest Son	12157 (67)	13007	2434 (70)	1701
Second Son	16731 (77)	13715	2349 (80)	1809
Middle Son	14957 (112)	15349	2139 (116)	1947
Youngest Son	12943 (74)	13251	2390 (82)	2001
	F test=0.98 *		F test=0.44*	

* This test indicates the observed differences between categories were more likely due to sampling variation than to real differences in the entire population.

Some insight into the interlocking factors of marriage, inheritance and status can be gleaned from a survey of cornbelt farmers in 1937, many of whom came from one of our sample points.[23] The farmers were interviewed about their own marriages (which clustered between 1890 and 1915), and also the marriages of their children (mostly 1910 to 1935). The results are shown in Tables 4.17A and B, which correlate the status of the two fathers of the newlyweds. In the older generation (4.17A), landowners strongly preferred to marry within their group, while the offsrping of tenants chose mates equally from owners' and tenants' children. (This imbalance was possible because owners outnumbered tenants 3 to 1 among parents.) In the younger generation (4.17B), the behavior of the tenant offspring appears unchanged. While the offspring of owners appear less finicky, as only 71% intermarried. Notice, though, that the ratio of owners to tenants has dropped to 2 to 1 (171 vs 86). Applying our standardization procedure, we can adjust 4.17B so that the marginals are equal to 4.17A, and inspect the implications for intermarriage (4.17C). That is, we can answer the counter-factural question of what intermarriage rates would have been if the ratio of owners to tenants had remained constant at 3 to 1. The results are surprising. Owners' children are almost as eager to marry within their kind as their parents had been (83% versus 88%). But tenant offspring reveal a significantly increased preference for marriage into the owners' circle (68% versus 53%). 53%). Everyone must have realized by the 1920's that economic survival in Iowa agriculture required access to land ownership. No doubt romance still blossomed on the prairie, only it was increasingly tempered with a measure of acreage.

Economic conditions in the 1920's and 1930's disrupted the equilibrium of farm mobility still more, and severely damaged a system which on

Table 4.17 A

Cornbelt Farm Family Intermarriage, c. 1890-1915

Status of Groom's Father (read across)	Status of Father-in-Law: Owner	Tenant/Laborer	N
Owner	88%	12%	267
Tenant/Laborer	53%	47%	92
N	284	75	359

Table 4.17 B

Cornbelt Farm Family, Observed Intermarriage, c. 1910-35

Status of Groom's or Bride's Father	Status of Father-in-Law: Owner	Tenant/Laborer	N
Owner	71%	29%	171
Tenant/Laborer	52%	48%	86
N	167	90	257

Table 4.17 C

Cornbelt Farm Family, Expected Intermarriage, c 1910-35

Status of Groom's or Bride's Father	Status of Father-in-Law: Owner	Tenant/Laborer	N Adjusted
Owner	83%	17%	267
Tenant/Laborer	68%	32%	92
Adjusted N	284	75	359

Note: This is Table 4.17 B standardized to fit the marginals of Table 4.17 A.

Source: Schuler, "The Social Status and Farm Tenure Attitudes and Conditions of Cornbelt and Cottonbelt Farmers", Social Report No. XV, Washington D.C.: U.S. Dept. of Agriculture, 1938.

paper at least, did give incentive to the little man. The farm depression forced farmers to be more flexible in their careers. A few who lost their property by foreclosure became renters; many moved into town to take up other occupations. It was not surprising that the rapid changes seen in the economic condition between the end of World War I and the mid 1930's caused considerable bitterness. The violence seen on the prairies of northwest Iowa took place in an area which only the decade before had seen a comparatively open system of farm mobility and great prosperity.[24]

Religion and Social Mobility

In Chapter 3 we noticed that religious groupings were correlated with status differences. The Congregationalists, Presbyterians and Episcopalians (our "High Status Protestant" grouping) were concentrated disproportionately in white collar occupations, while Catholics and Lutherans were more often farmers. (See table 4.18A). Several different forces were compounded here, and our task now is to sort them out in their effects on the social status of sons in 1925. First, the fathers differed by religious grouping in the proportions who were white collar, blue, and farmers. Second, the rate at which sons from each group moved up or down differed by religion. Let us answer the counterfactual question--what would the sons' status have been if the fathers in each religious grouping had identical status profiles, notably 10.1% white collar, 18.2% blue, and 71.7% farmers? Using the observed outflow rates for each religious group, and the hypothetic fathers' distribution, we arrive at Table 4.18B. The differences between 4.18A and B are shown in 4.18C. This shows that their fathers' status made Catholic sons 1 point more likely to be farmers (60% observed, 59% expected), and slightly less

likely to be white or blue collar workers. The greatest difference came in the ranks of "High Status" Protestants and non-denominational Protestants, with fewer farmers than expected.

Having ironed out the effect of fathers' status, we can now see how much effect each religion had on the mobility of the sons. (Table 4.17D) If each religion had an identical effect, then the sons in each row of table 4.17B would have been divided 20-25-55 among white collar, blue and farm occupations. For most groups, the differences between the adjusted observed rates and the expected rates are not great--considering our sample sizes, a 3 or 4 point difference is slight. However, religion made a very great difference for high status and non-denominational Protestants. Both groups had an intergenerational mobility out of farming, and into white collar jobs for the first group and into blue collar jobs for the second.

At this stage it would be tempting to try to show that the superior education of the High Status Protestants, and the inferior schooling of the non-denominational Protestants produced these results. Unfortunately, with only 71 and 82 white collar sons in these respective groups, we have too few cases to cross-tabulate education with father's status. But we can notice in Table 4.17D that Protestants were more likely than Catholics or agnostics to favor white collar jobs, that Protestant and Catholic church members were less likely than non-members to become blue collar workers, and that Catholics, Lutherans and agnostics were particularly inclined to stay in agriculture. The impression is that the urban middle class attracted religious men, the urban working class attracted non-religious men, and that a traditional religious background inclined men to remain on the farm.

Table 4.18 A

Observed Son's Status by Religion
(read across)

Religion	White Collar	Blue Collar	Farmer	N
High Status Prot*	48	17	35	149
Prot, unspecified	28	44	27	289
Lutheran	20	19	61	206
Catholic	19	21	60	330
Low Status Prot**	17	21	62	588
No Religion	13	25	62	394
All	20	25	55	2080

* Presbyterians, Congregationalists, Episcopalians
** Methodists, Christians, Baptists, and all unlisted denominations.

Table 4.18 B

Expected Son's Status by Religion

Religion	White Collar	Blue Collar	Farmer
High Status Prot.	41	17	42
Prot. unspecified	25	41	35
Lutheran	22	21	58
Catholic	19	21	59
Low Status Prot.	18	23	58
No Religion	14	26	60
All	20	25	55

Note: Contructed from observed social mobility pattern of each group by assuming the fathers in each group were 10.1% White Collar, 18.2% Blue Collar and 71.7% farmers.

Table 4.18 C

Total Effect of Father's Status on Son's Status, by Religion

Religion	White Collar	Blue Collar	Farmer
High Status Prot.	+7	0	-7
Prot unspecified	+4	+4	-7
Lutheran	-2	-2	+4
Catholic	0	0	+1
Low Status Prot.	-1	-2	+2
No Religion	-1	-1	+2

Note: Entries are the differences of cell entries in Tables 4.18A and 4.18B

Source: Sample Data.

Table 4.18 D

Total Effect of Religion on Son"s Status
Controlling for Fathers' Status

Religion	White Collar	Blue Collar	Farmer
High Status Prot	+21	-8	-13
Prot, unspecified	+5	+15	-20
Lutheran	+2	+4	+3
Catholic	0	-1	+2
Low Status Prot.	-1	-2	+3
No Religion	-6	+1	+5

Source: Sample Data.

Conclusion

Our excursion through the numerical thickets of intergenerational mobility Tables has emphasized the importance of industrialization, education, inheritance, and religion in accounting for the redistribution of Iowa's human crop into occupations and status groups. It would be a mistake to jump from an analytical separation of these factors to the conclusion that they were operating independently. The industrialization of the labor force was made possible, to varying degrees, by the willingness of families to educate their children in new skills, by the increasing shortage of good farmland, and by the refusal of Iowans to insist upon living on the farm at the cost of subdividing land holdings to a subsistence level. The modern quest for wealth--or is it an ancient quest?--preoccupied all Iowans, but some groups were better at it than others, or perhaps more willing to sacrifice today's leisure and luxury for tomorrow's promise.

FOOTNOTES CHAPTER IV

1. The first small scale attempt was Merle Curti The Making of an American Community (Staford U.P. 1959); compare Ray Billington, America's Frontier Heritage (New York: Holt, Rinehart, and Winston, 1966).

2. After automobile ownership became widespread, a man could live in open country and commute to a non-farm job.

3. It was more complicated than this. Doubtless some of the blue collar fathers at one time or another had been farmers or even white collar workers, so perhap their sons were not making such a dramatic change in life style. Likewise for farm and white collar fathers and their offspring. With data for only a couple points in time we cannot explore these possibilities.

4. Note that only 10% of the fathers were white collar, versus 20% of the sons. Blue collar ranks grew from 18 to 25%, while the farm sector shrank from 72 to 55%. Tables 4.2 and 4.4

5. Melvin L. Kohn, Class and Conformity: A Study in Values (Homewood, Il: Dorsey Press, 1969), 136; lent compare Richard Hamilton, Class and Politics in the United States (New York: Wiley, 1972), ch.9.

6. For a general discussion of the politics of class in Iowa and Illinois, see Richard Jensen, The Winning of the Midwest: Social and Political Conflict, 1888-1896 (Chicago: U of Chicago Press, 1971), and especially Illinois (New York: Norton, 1976).

7. Otis Dudly Duncan, "Methodological Issues in the Analysis of Social Mobility," in Smelser and Lipset eds., Social Studies and Mobility in Economic Development (Chicago: Aldine, 1966), p. 51-97. Lawrence E. Hazelrigg, "Partitioning Structural Effects and Endogenous Mobility Processess in the Measurement of Vertical Occupational Status," Acta Sociologica, 17 (1974), p.115-129.

8. The ratio method used in Tables 4.11B, 4.12B and 4.13B has the effect of excluding the impact of industrialization. Unfortunately, the ratios are highly liable to fluctuate because of small cell sizes.

9. In 1930 in rural Iowa, 2% of the children 11 to 15 were boarding in towns, and 10% of the youth 16 and over were in high school. W.H. Gaumnitz, "Availability of Public School Education in Rural Communities" U.S. Office of Education, Bulletin, 1930 No. 34, p. 17,41.

10. Clifford Merill Drury, "Growing Up on an Iowa Farm, 1897-1915" Annals of Iowa 62 (1974), 161-97.

11. The Alumni of Iowa State College (Ames, Iowa: Iowa State Press, 1925.)

12. A comparison of students at nine Midwestern teachers colleges and eight liberal arts colleges in 1933 showed that 32% of the former, and only 13% of the latter came from farm families. Edward S. Evenden, Guy C. Gamble and Harold G. Blue, Teacher Personnel in the United States (vol.2 of "National Survey of the Education of Teachers") U.S. Office of Education, Bulletin 1933, No.10, p.135. See also Mary Ledge Moffett, The Social Background and Activities of Teachers College Students (New York: Columbia Teachers College, 1929) and Ora E. Reynolds, The Social and Economic Status of College Students (New York: Columbia University Press, Teachers College, 1927).

13. Maps of the county of origin of students at each college in Iowa appear in "State Higher Educational Institutions of Iowa," U.S. Bureau of Education, Bulletin, 1916, no. 19, pp.34-36, 212-20. The great majority of students travelled no more than fifty miles to college, and the entire western half of the state had only sour small colleges in 1916, compared to 22 larger schools in the central and eastern sections. Interstate student movements were numerically negligable.

14. W.J. Spillman, "The Agricultural Ladder," American Economic Review Supplement, March 1919, and Eiven J. Long, "The Agricultural Ladder: Its Adequacy as a Model for Farm Tenure Research," Land Economics, XXVI, (1950) pp. 268-273.

15. Merle Curti, et al, The Making of an American Community (Stanford: Stanford UP 1959).

Allan Bogue, From Prairie to Cornbelt: Farming on the Illinois and Iowa Prairie in the Nineteenth Century (Chicago: U. of Chicago Press, 1963).

Margaret Beattie Bogue, Patterns From the Sod: Hand Use and Tenure in the Grand Prairie. 1850-1900 (Springfield: Illinois State Historical Library, 1959)

William G. Murray, "An Economic Analysis of Farm Mortgages in Story County, Iowa, 1854-1931." Iowa AES Research Bulletin No. 156, 1933. Norman V. Strand, "Prices of Farm Products in Iowa, 1851-1940," Iowa AES Research Bulletin No. 303, 1942 Frank T. Bachmura, "Geographical Differentiala in Returns to Corn Belt Farmers: 1869-1950." Ph.D. U of Chicago, 1953.

16. Carl C. Taylor, et al., "Disadvantaged Classes in American Agriculture," U.S. Department of Agriculture, Social Report No. VIII, p. 45.

17. Benjamin H. Hibbard and Guy A. Peterson, "How Wisconsin Farmers Became Farm Owners," Wisconsin Agricultural Experiment Station, Bulletin No. 402, 1928, p. 14.

18. Elvin Hatch, "Stratification in a Rural California Community," Agricultural History, XLIX (1950, p. 21-39.

19. Edward O. Moe and Carl C. Taylor, "The Culture of a Contemporary Rural Community," U.S. Dept. of Agriculture Rural Life Studies, 5, December 1942.

20. Spillman, "The Agricultural Ladder," p. 171.

21. George Van Tungeln, "The Social Aspects of Rural Life and Farm Tenancy, Cedar County Iowa." Iowa Agricultural Experiment Station, Bulletin No. 217, pp. 455-457.

22. E.A. Schuler, "Social Status and Farm Tenure Attitudes and Social Conditions of Cornbelt and Cotton Belt Farmers," U.S. Dept. of Agriculture, Social Research Report IV, pp. 117-118.

23. Ibid, p. 136.

24. John Shover, Cornbelt Rebellion (Urbana: University of Illinois Press, 1965).

Chapter V

Occupational Mobility and Socio-economic Achievement

So far in this study only a cursory attempt has been made to understand the process of mobility in the early 20th century. Our aim in the following chapter is to thoroughly explore the question of stratification in Iowa. As has been pointed out, "the most important parameter of the process of stratification in a society is the degree of association between background or social origin, and achievement."[1] Therefore, it is vital to show, for example, how well home environment and father's occupational status explained educational attainment. Likewise, to what extent did schooling itself exert influence on occupational status, and to carry the analysis a shade further, how much did all these factors combined determine an individual's income. We have already found that the majority of Iowans showed scant interest in continuing their education beyond the primary level. At the same time, an analysis of the rate of return of education indicated that a high school and college education was a good investment monetarily, and a virtually essential one for those who sought white collar status. To explore the connection among these findings we shall use path analysis to measure the cause and effect of background characteristics upon education, occupation, and earnings; and multiple classification analysis to further explore and disentangle the economic rate of return Iowans derived from education.

Historians and sociologists have always implicitly assumed that in "equalitarian" heartland Iowa in the first years of this century most social mobility outside the farm sector could be attributed to "achieved" characteristics rather than to "ascribed" ones. This assumption implies that the influence of a father's occupational status and economic position would have little bearing on his son's educational attainment, his occupation or his income, and that in turn, education would be the primary force behind occupational status. In short, we should expect the proverbial egalitarianism of midwest folklore to be apparent in the achievement process of Iowa.

In order to present a coherent discussion of our findings we must briefly discuss methodological procedures. Our basic variables are father's occupation and father's economic status, the number of siblings of each respondent, his years of educational attainment, 1915 occupation, and 1915 earnings. They will be arranged in a dynamic model derived from Blau and Duncan's American Occupational Structure: As far as possible their recursive model or rather a more recent version of it,[2] will be used with some minor, but with one major modification. Although our data permitted the calculation of status scores for each occupation, these scores were a product of the same education and income variables used in the model. Because their intrusion in their original form would have made a mockery of results, our only recourse was to design an ordinal scale from 10 to 1 which was a derivation of the empirical occupational status scores.[3] Furthermore, as age was an important determinant of education, occupation and income, the non-farm population was divided into synthetic cohorts of four different age groups: those

aged under 30 in 1915, those 30 to 39, 40 to 49, and 50 and older. A further set of equations involved the farm population. Here a more compact model was designed which by-passed the measurement of occupational mobility. As the economic status of the fathers of most farmers was available, their farm value was substituted for occupational status. Again, the analysis of the farm population was controlled for age.

Table 5.1 shows the zero-order correlations between variables together with their means and standard deviations for Iowans in non-farm occupations in 1915. Overall our hypothesis about "the openness" of this society would seem to be confirmed. A father's occupational status, the most important background variable, had a weak relationship with both a respondent's education (column 3) and occupation (column 5); in no case predicting even 3% of either pattern.

These weak relationships were partly caused by the inclusion of a large number of men whose fathers were farmers. For when a similar analysis was run on men who had lived all their lives in an urban situation, a father's occupation exerted greater influence on education, and at the same time was a better predictor of a son's occupation than his son's education was.[4] This was not the case among the general urban population analyzed here, which includes many migrants for in all age groups education was a good predictor of occupational status. As might be expected a strong correlation was found between an urbanite's occupational status and his income.

Our earlier bivariate analysis ignored number of siblings as a factor in occupational mobility. In the two youngest cohorts, number of siblings correlated negatively with all career variables, and with education in all age groups. That is, the more siblings a man had, the

Table 5.1

Zero-Order Correlations for Occupational Mobility Model, Urban Iowa, with Age Controls

5.1A Men under 30, 1915, N=384

	1	2	3	4	5	Mean	S.D.
1	–	.005	.147	.128	.100	6.34	1.57
2	–	–	-.180	-.077	-.066	3.72	2.35
3	–	–	–	.313	.094	8.42	2.58
4	–	–	–	–	.315	5.21	1.98
5	–	–	–	–	–	$ 693	792

5.1B Men 30-40, 1915, N=350

	1	2	3	4	5	Mean	S.D.
1	–	.007	.155	.238	.139	6.52	1.52
2	–	–	-.101	-.079	-.023	3.75	2.42
3	–	–	–	.386	.134	7.88	2.97
4	–	–	–	–	.290	6.39	1.84
5	–	–	–	–	–	$1140	965

5.1C Men 40-50, 1915, N=221

	1	2	3	4	5	Mean	S.D.
1	–	.046	.113	.164	.143	6.53	1.31
2	–	–	-.158	-.069	.030	4.29	2.38
3	–	–	–	.483	.337	7.76	3.19
4	–	–	–	–	.395	6.59	1.87
5	–	–	–	–	–	$1169	1259

Table 5.1
(Cont.)

Zero-Order Correlations for Occupational Mobility Model, Urban Iowa, with Age Controls

5.1D Men 50 and Over, 1915, N=94

	1	2	3	4	5	Mean	S.D.
1	–	.068	-.008	.344	.161	6.73	1.21
2	–	–	-.068	.148	.105	4.87	2.29
3	–	–	–	.459	.398	7.11	3.30
4	–	–	–	–	.477	6.84	1.48
5	–	–	–	–	–	$1145	1127

5.1E Men, All Age Groups, 1915, N=1064

	1	2	3	4	5	Mean	S.D.
1	–	.027	.111	.198	.136	6.43	1.47
2	–	–	-.149	-.023	.008	3.96	2.39
3	–	–	–	.316	.180	7.95	2.94
4	–	–	–	–	.376	6.04	1.97
5	–	–	–	–	–	$ 982	1011

Key:

1 Father's Occupational Status

2 No. of Siblings

3 Years of Education

4 Respondents Occupational Status

5 Income 1915

less education, status and income he received. This, as has been noted in recent studies, was a logical result. Fewer siblings would allow parents to concentrate more resources on each child; this in turn would permit a better start in life. Indeed, a small number of children is characteristic of more modern, more achievement-oriented families worldwide. Therefore, in all cohorts fewer brothers and sisters allowed men to stay in school longer. In addition, with the two younger cohorts, coming from a smaller family would seem also to produce a slight advantage in later life.

"The openness" of Iowa urban society in this period was made even more explicit when we applied the data to the model which treats income and education as caused by background factors. The method was straightforward. First, education in years was regressed with father's education and number of siblings. Then 1915 occupation was regressed onto education, father's occupation, and number of siblings; the last equation regressed 1915 income on all the previously mentioned variables. The standardized regression coefficients (which make it possible to compare unlike units, such as dollars and years of school) are the path coefficients.

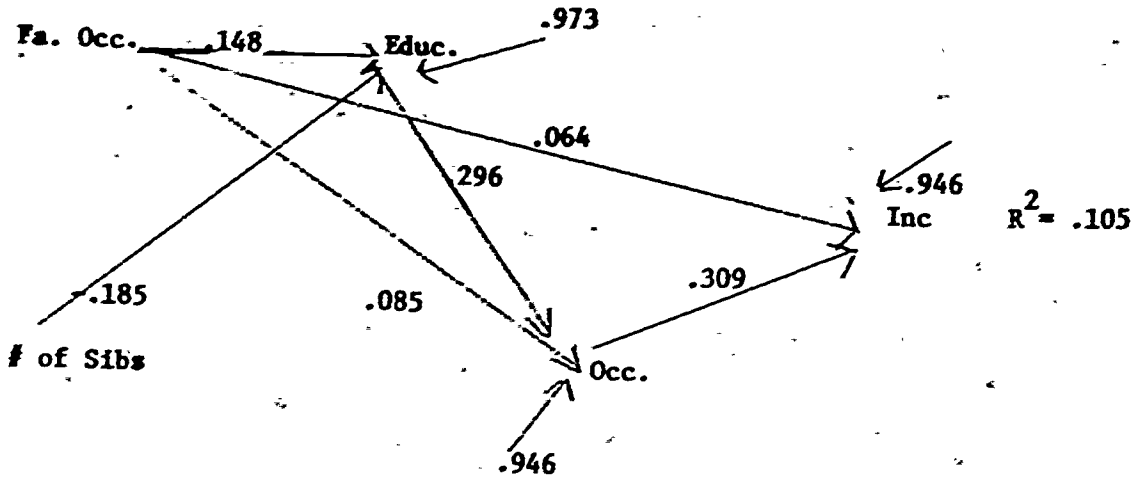
Figure 5.1 shows the path coefficients in all the equations for age groups in the study, the results for the total urban population, and Duncan's standardized coefficients for middle aged men in 1962. Again the results were influenced strongly by the rural backgrounds of a large number of men. Only in one cohort, did number of siblings have more influence on education than father's status, but unlike the 1962 results, in Iowa a father's occupation had little influence upon a son's education. (As already noted, with men born and bred in an urban environment, background was much more influential in both predicting education and

occupation, and results differed only slightly from contemporary materials.) Among the total urban population, analyzed here, something similar was also discernable. When predicting occupation, a father's status was marginally more important than in 1962, however education had less power than it had fifty years later. Thus it would appear that ascribed characteristics in 1915 still retained some importance as far as occupational mobility was concerned, although education was beginning to exert greater influence on the mobility process. Finally, while the background variables had very little impact on earnings, occupation in urban Iowa in 1915 had a stronger impact on income than in 1962. This was probably caused by the post World War Two trend for the gap between white and blue collar incomes to narrow.

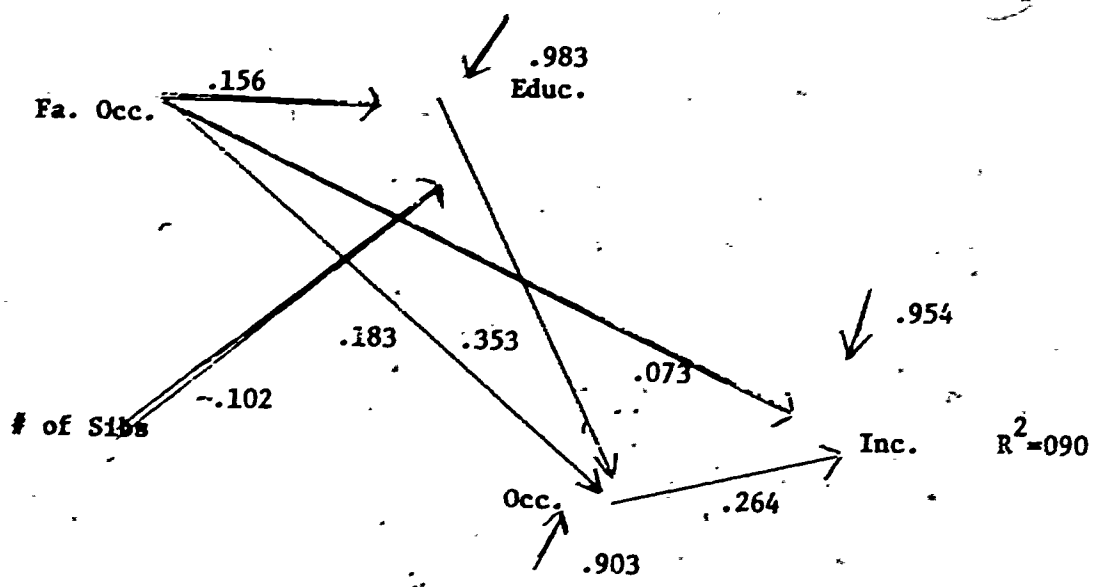
In view of the small coefficients of determination (R^2), and the large amount of unexplained variance indicated on the diagrams, we do not wish here to fall into the trap encountered by Jencks. He has suggested that because the amount of variance explained in predicting socioeconomic status was disappointing, luck, more than any measurable factor, played a major part in achievement over the life cycle.[5] Another interpretation could just as easily ascribe it to pluck. In this study our interest is more with the inter-relationships of variables, and especially of background on occupation and education. Measurement problems, and the large number of men with rural backgrounds hampered the analysis. However, despite these methodological deficiencies, some conclusions can be drawn from the results. Among the total urban population of Iowa the process of mobility showed some similarity to contemporary trends. While family background had little influence on education, education was in turn fairly influential in determining status and income.

Figure 5.1: Path Diagram
Occupational Mobility Model, Urban
Iowa, 1915.

Under 30, 1915



30-39, 1915



40-49, 1915

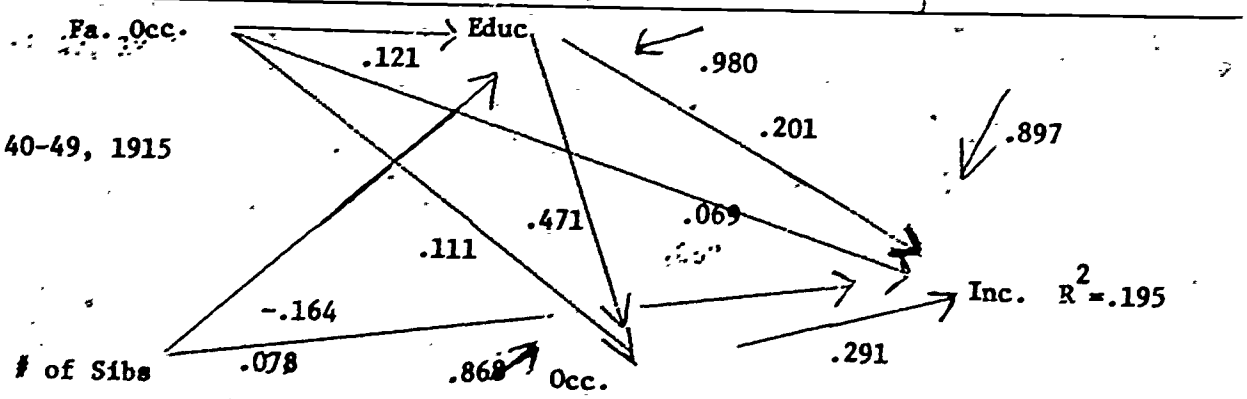
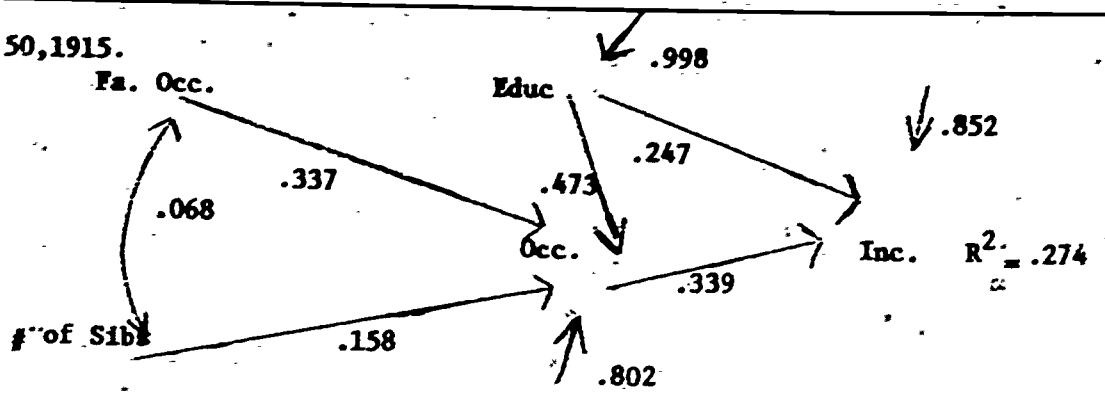
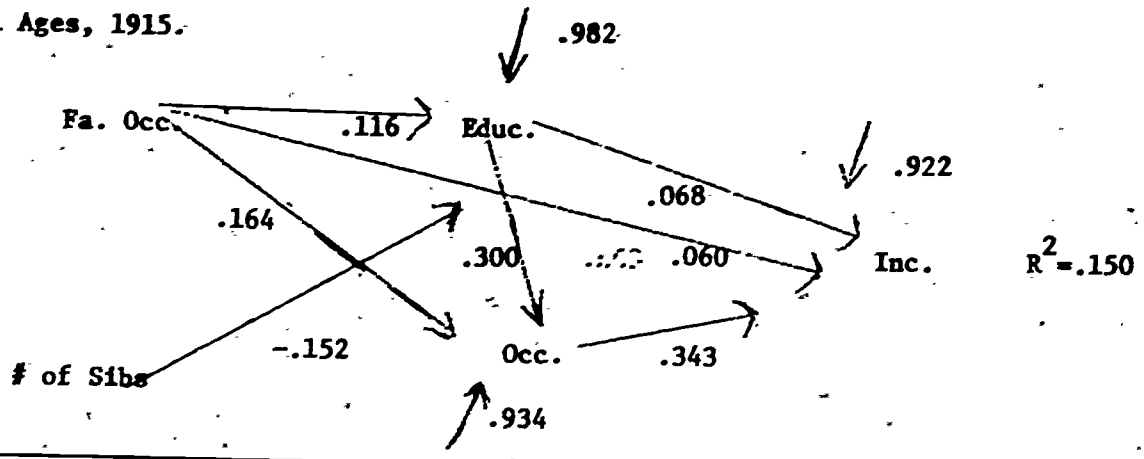


Figure 5.1: Path Diagram
Occupational Model, Urban, Iowa
1915
(Cont)

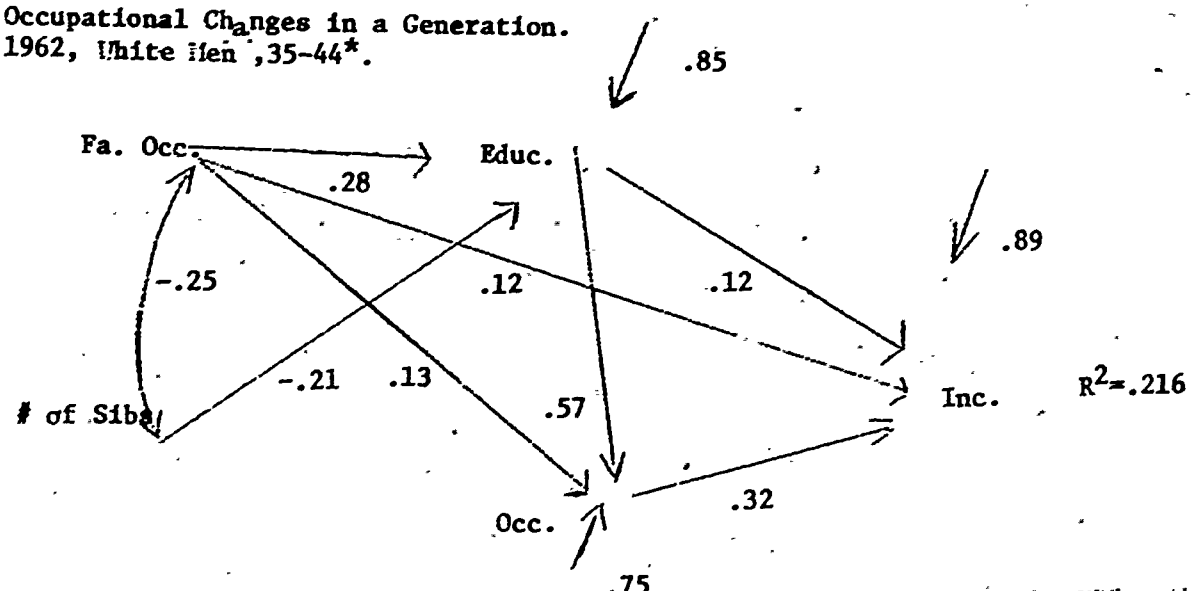
Over 50,1915.



All Ages, 1915.



Occupational Changes in a Generation.
1962, White Men ,35-44*.



Source: Sample Data.

* OCG materials come from Otis Dudley Duncan et al., Socioeconomic Background and Achievement(New York: Seminar Press, 1972),pp. 39-40.

Thus our earlier hypothesis that urban Iowa was an open society, would seem to be confirmed. But at the same time it must be recognized that the powerful influence of the countryside on the occupational structure of Iowa cities and towns tended to dampen the legacy of ascriptive factors. In which case achievement had not entirely triumphed in the process of stratification in urban Iowa.

Background and Achievement on the Farm

As our earlier inquiry into the agricultural ladder showed farm social mobility and consequently opportunity on the farm seemed to be decreasing in the first two decades of the century. Our task here is more modest than in the previous section. It is simply to look at the experiences of two different cohorts, one of mature farmers, and another of the young men who had only recently taken over their father's farms, to understand the importance of background in explaining farm property accumulation. Our strategy is to use one equation only, regressing 1915 farm value upon father's property value, number of siblings and education.

In Table 5.2 the zero order correlations of both cohorts show almost identical strength between inter-generational property value, but the educational attainment variable among mature men had a much stronger influence on property values, than it had for younger men. The older men had many years to use their education in adopting more modern and efficient techniques, while the younger ones had not yet had many of these opportunities. The wealth of the younger farmers depended mostly on the inheritance they had from their father. Also, the inheritance of older farmers came when land was cheaper; indeed, many of the older farmers had not inherited any property at all from their fathers, but

had worked up the ladder. Thus the older farmers' economic standing was influenced more by their modest educational accomplishments than by the effect of intergenerational property transmission. While the differences in economic success between these two cohorts was partly attributable to life cycle effects, parental influence on their lives, from an economic viewpoint, was also important. In addition the primacy in the younger cohort of the father's property values, also pointed to a tightening of opportunities in open country Iowa.

Economic Returns and Achievement

If the section on the socioeconomic achievement of urban men established that ascribed factors had little effect on the lives of Iowans, it would seem logical, therefore, to assume that achievement, especially in towns and cities, was largely the result of individual effort once a man left home for the first time. On the other hand, educational attainment did hinge to a considerable degree upon a decision by parents to permit children either to leave or continue their studies. Whether they made that decision themselves, or their parents made it for them, to some degree their lives were affected in later years by how much education they obtained. In this section we will be again concerned with calculating the economic returns derived from education, and--in addition--their consequent effect on income inequality among occupations. Moreover, we will make some estimation of the differences between ethnocultural groups in their earning capabilities with basically the same model as was used earlier.

However, first let us dwell briefly upon the effect of parental occupation on earnings. Table 5.3 displays the earnings of Iowa men

Table 5.2

Farm Mobility 1915, Zero-Order Correlations and Beta Coefficients, Mature and Young Farmers

Mature Farmers
Zero-Order Correlations

	Father's Property Value	Siblings	Education	Property 1915	Mean	S.D.	
Father's Property	-	.183	.267	.291	5547	4774	
Siblings	-	-	-.012	-.012	4.79	2.30	
Education	-	-	-	.328	6.74	2.40	
Property Value 1915	-	-	-	-	20133	15339	N=174

Mature Farmers
Beta Coefficients

	Education	Siblings	Father's Property Value	R^2
Property Value 1915	.269	(.-064)	.231	.153

Young Farmer
Zero-Order Correlations

	Father's Property Value	Siblings	Education	Property Value 1915	Mean	S.D.	
Father's Property Value	-	.028	.261	.297	14655	16153	
Siblings	-	-	-.175	.089	3.77	2.29	
Education	-	-	-	.003	7.53	2.41	
Property Value 1915	-	-	-	-	19136	11158	N=79

Table 5.2
(Cont.)

Young Farmer

	Beta Coefficients			
	Education	Siblings	Father's Property Value	R^2
Property Value 1915	(.066)	(.064)	.312	.088

Note: Parentheses enclose each coefficient less than its standard error in absolute value

Source: Sample Data.

in 1915 classified by the occupation of their fathers calculated as a percentage of the grand occupational mean. As in all the following tables, the data are shown in the left hand column with no controls, then in the central column with controls from categorical variables, and finally in the right hand column with controls from appropriate variables measured in both categorical and interval form.

For purposes of clarification, Table 5.3 should be read as follows. The first column gives the actual income of each group of sons according to the father's occupation. Column two shows what the relative incomes would have been if each row of sons had the same occupational profile. Column three shows what the relative incomes would have been if each row of sons had the same occupational profile and the same age distribution. The results were produced by the Multiple Classification program of SPSS, which is essentially a multiple regression routine.

Except for the sons of professionals, controls made little impact on the spread of incomes around the mean. More interesting was the gap between the high status and low status occupations. Without controls 95 percentage points separated the sons of managers from the sons of operators (166 versus 71); with controls this gap was reduced to 67 points (150 versus 83). Although it would seem obvious from the data that there were some advantage from coming from a managerial household, it should be remembered that they only constituted about 3% of the intergenerational sample members. Farm owners' sons, who made up over 50% of the population scored very close to the mean. Thus if we disregard the managers, for a moment, the spread between occupations with controls was only 28 percentage points. Though this is not to deny the advantages of a background from a high status home, especially when a father was a prosperous businessman or professional, these data confirm the earlier

Table 5.3

Mean 1915 Earnings of Iowa Workers by Father's Occupation as a Percentage of the Grand Mean, 1915-1925 Traced Sample

Occupation of Father	No Controls	Controls for Son's Occupation	Controls for Son's Occupation and Age
Professional	128%	99%	105%
Manager	166	154	150
Farm Owner	105	105	103
Proprietor Merchant	96	88	92
White Collar	83	70	77
Skilled Craft	91	93	96
Operator	71	78	83
Laborer	70	78	77
Farm Renter	91	93	97
Farm Laborer	76	84	93

Mean $980=100, N=1197

impression that advantages from ascribed characteristics were minimal once a man began his career. On the other hand, within the second generation urban population, the transmission of socio-economic status in the highest occupational ranks was clearly apparent from the actual incomes without controls.

Let us now turn to the question of economic returns derived from schooling. There is little doubt that the characterization of the typical Iowan as a market-oriented economic man would be correct.[6] The necessity of farmers and small town businessmen to keep very close contact with market fluctuations was an indicator that, in comparison to men in other walks of life, the economy played a vital part in their lives and livelihood. Since the economic rewards from education were substantial, purely from the materialistic viewpoint we should expect that Iowans would invest in education. However, as we saw in a previous chapter, because the returns from education took many years to mature, and there were cultural and other biases against education, more tangible investments were sought out.

In Table 5 4 we have dug deep into our data resources for material which compares economic returns from education. Table 5.4A are 1925 urban dwellers who were traced back to 1915. Table 5.4B is another sample of all urban dwellers in 1915, and Table 5.4C is a sample of all farmers in 1915. There is little doubt that the tiny proportion of college graduates in the traced sample (5.4A) achieved substantial economic benefits from their education. All these men were pillars of their communities and their advantage in comparison to the college graduates in the urban sample was a result of their geographical stability. The 85 point spread (171 versus 86) between college graduates and men

Table 5.4A

Incomes of Iowans with Different Amounts of Schooling as a Percentage of the 1915 Average, 1915-1925 Traced Sample

Education Years	No Controls	Controls for Occupation	Controls for Age and Occupation
1-4 Rural	89%	93%	86%
5-8 Rural	93	97	95
1-4 Graded	95	104	100
5-8 Graded	93	99	101
Some High School	101	98	104
High School Grad.	107	101	105
Some College	131	106	109
College Graduate	227	169	171

Mean $980=100 N=1944

Table 5.4B Incomes of Iowans with Different Amounts of Schooling as a Percentage of the 1915 Average, Urban Sample

Education Years	No Controls	Controls for Occupation	Controls for Age and Occupation
1-4 Rural	67%	83%	83%
5-8 Rural	80	90	90
1-4 Graded	50	76	76
5-8 Graded	92	101	101
Some High School	109	100	100
High School Grad.	131	123	123
Some College	144	113	113
College Graduate	170	124	124

Mean $1017=100 N=1025

Table 5.4C

Incomes of Iowans with Different Amounts of Schooling
as a Percentage of the 1915 Average, Farm Sample

Education	Controls for Age	
1-4 Rural	109%	
5-8 Rural	100	
1-8 Graded	71	
Some High School	110	Mean $1086=100
High School Graduate	115	N=671
Some College	106	

Source: Sample Data

with only 1-4 years of country schooling was no greater than that found in contemporary data between primary school graduates and men with graduate degrees.[7]

As regards those with less schooling, while our returns in 5.4A show that earnings increased when more education was invested, the spread was only 23 points (109 versus 86) between men with some college and men with rural educations. As was expected, the urban population demonstrated more inequality in earnings and high school graduates possessed considerable advantage over those who had left school at the eighth grade. In essence the differences between these two populations were caused by the absence of farmers in the latter. For when farmers were analyzed alone (5.4C) education had only a trivial impact on income. This last result perhaps confirms the traditional skepticism of farmers about the powers of education to improve their incomes when national factors so heavily determined prices. In the long run, as we noted before, education and wealth were correlated for older farmers.

Thus although there were indicators that education did bring economic benefits, much of its impact was due to background factors working in conjunction with occupation. Indeed, when we turned to inequality among occupational groups, the stratification of Iowa society was pronounced. In the traced sample (5.5 A) high status white collar men earned twice as much as unskilled workers, and only farm owners approached the earning power of professionals and managers. In the sample of all urban men (Table 5.5B), the symmetry according to status was not so obvious. Two groups stood out. The "farmers" in this case were migrants who had only recently taken up residence in cities and towns. Their economic performance had suffered as a result. Migration also contributed to the strong performance of the proprietors. Their average income of 41% above the

mean was due to the need for flexibility in their business affairs. In the traced sample (5.5A), the proprietors (the small town and village merchants) had lower incomes because they were more stable; they presumably were less prepared to take the risks involved in operating small businesses dependent on the farm economy. For this reason their returns were less impressive.

When the simplified occupational structure was analyzed (Table 5.5C) the small elite of high status white collar men exerted less upward pull on the total white collar population. Even so white collar workers earned 8% more than farmers (114 versus 106). However, both farmer and white collar earnings were far more impressive than those of blue collar workers (114 and 106 versus 70).

Finally, despite the fact that ethnocultural variables exerted little or no direct effect upon earnings, it is important to ascertain the distribution of income from an ethno-religious perspective because of our earlier emphasis on religion and ethnicity as a useful guide to achievement among Iowans. In Table 5.6 the model used in the first section of this chapter, with the addition of religion and ethnicity, was adopted to predict earnings.

Certainly the most striking result in the ethnic panel is the declension of the old stock Americans. They were fully 31 percentage points below the British, and eleven points below the Irish in their earnings. Their diversity, unlike that within other ethnic groups, was largely responsible for this. With transplanted southerners, prosperous urban professionals and dirt farmers in the "southern triangle," all skewing the results, the variance in their earnings was considerable. Both the East European and the Northern European results were distorted

Table 5.5A

Mean 1915 Earnings of Iowans by Occupational Category as a Percentage of the 1915 Average: Traced Sample

Occupation	No Controls	Controls for Education	Controls for Age and Education
Professionals	225%	189%	187%
Managers	175	170	165
Farm Owners	120	121	119
Proprietors	108	106	103
White Collar	79	79	83
Skilled Craft	80	80	79
Operators	75	77	77
Laborers	56	54	61
Farm Renters	86	88	92
Farm Laborers	36	38	48

Mean $980=100, N=1944

Table 5.5B Mean 1915 Earnings of Iowans by Occupational Category as a Percentage of the 1915 Average: Urban Sample

Occupation	No Controls	Controls for Education	Controls for Age and Education
Professionals	184%	168%	169%
Managers	172	167	167
"Farmers"	77	84	84
Proprietors	144	141	141
White Collar	86	85	84
Skilled Craft	82	84	85
Operators	92	94	94
Laborers	52	58	58
"Farm Laborers"	49	51	51

Mean $1017=100, n=1025

Table 5.5C Mean Earnings of Iowans by Occupation as a Percentage of the Grand Mean, Traced Sample

Occupation	No Controls	Controls for Ethnicity & Religion	Controls for Ethnicity, Religion, Age, Ed., Sibs. and Father's Occupation
White Collar	136%	134%	114%
Blue Collar	65	65	70
Farm	101	102	106

Mean $980=100, N=1061

Source: Sample Data

by sampling error. Neither ethnic group had more than twenty intergenerational cases, and in both groups a substantial number of men would have probably given the former a less impressive performance, and would have improved the return of the Northern Europeans. Religion, on the other hand, had little effect upon income distribution, with or without controls. However, it did allow some important insights into income distribution among old stock Americans. With the exception of the agnostics who were the largest group, and were invariably farmers isolated from religious institutions, the old stock religious denominations showed some advantage over Catholics and Lutherans. Controls improved the position of unaffiliated Protestants, but had the reverse effect upon high status Protestants. It was significant that in Iowa, which was largely a Protestant state, Catholics displayed the greatest disadvantage among all religious groupings.

Conclusion

The final answers to the question of the "openness" of the stratification system in Iowa will have to wait until the following chapter when the migration patterns of Iowans will be analyzed. However, our material on the economic returns for education, and the relationship between occupation and income, have already indicated the presence of a small elite in the state who stood out dramatically from the rest of the population. Their advantage stemmed largely from their high status backgrounds, which in turn permitted high educational attainment, and high socio-economic status. But in the total urban population, which included a number of farm born men who tended to dampen the effect of background on education and occupation, the impact of the elite was minimal.

In fact there was an open stratification system in urban Iowa in the first two decades of this century. Background, as we have been able

Table 5.6

Mean 1915 Earnings of Iowans by Ethnicity and Religion as a Percentage of the Grand Mean, Main Sample

Ethnicity	No Controls	Controls for Religion	All Controls*
East/Southern Europe	111%	127%	136%
Old Stock	95	92	91
Scandinavian	108	110	115
British	131	127	122
Other North Europe	60	61	58
German	102	107	111
Irish	104	109	102

Mean $980=100, N=1061

Religion	No Controls	Controls for Ethnicity	All Controls**
No Religion	89%	94%	96%
Protestant No Affiliation	114	118	121
High Status Prot.	125	119	106
Low Status Prot.	100	102	99
Catholic	99	89	93
Lutheran	98	92	98

Mean $980=100, N=1061

Source: Sample Data

*Controlling for religion, occupation, education, siblings and father's occupation.

**Controlling for ethnicity, occupation, education, siblings and father's education.

to measure it, had very little impact on educational attainment; and as in a modern society education had some influence in predicting occupational status. While the overall ability to predict income was not great, the results were similar to the Duncan 1972 results, which explained only 7% more of the pattern of men's incomes. With farmers' sons included in our analysis, our correlations were bound to be somewhat lower. On the other hand, we can be certain that the farm sector, in comparison, was comparatively closed. A father's land holdings correlated reasonably strongly with those of his son, and as was indicated in our previous analysis of the agricultural ladder, multivariate techniques also indicated some blockage in mobility among farmers.

The skeptical attitude of the majority of Iowans towards education seemed partly justified when the rate of return for earnings was calculated and compared to years of schooling completed. To be sure, a college education allowed Iowans to accumulate great economic advantage over the remainder of the population. But in the main traced sample a high school education or one or two years of college did not give an individual any special advantage once all other factors were considered. Again the impact of farmers with low educational attainment and comparatively high earnings, was the principle cause of this phenomenon. In the urban sample, however with the influence of farmers minimized, a high school diploma did give a man a significant income boost, all other factors considered. Not surprisingly education produced little differentiation among farmers' incomes. Indeed, possibly because of sampling error, farmers with rural educations earned more, on average, than college matriculates!

Neither ethnicity or religion were important in predicting earnings, and patterns generally showed the lack of differentiation between ethno-

religious groups. Occupation, however was a potent force in determining income and confirmed the inequality between high status white collar men and the remainder of the urban workforce. But for all this inequality and stratification, the income gap between professionals and laborers was in fact no greater in 1915 than it was in 1962.

1. Otis Dudley Duncan, et al., Socio-economic Background and Achievement. (New York: Seminar Press, 1972), p. 4.

2. Ibid., pp. 37-49. "Recursive" means that the influences go only in one direction. That is, a son's education is completed after his father's occupation and the number of his siblings is fixed; a son's occupation is determined after his formal schooling is finished, and his income is determined after his occupation is decided. One can dream up possible counterexamples, but there could not have been enough exceptions to change our results.

3. See Methodological Appendix.

4. See Chapter VI, pp.

5. Christopher Jencks, et al., Inequality (New York: Basic Books, 1972), p. 227. Jencks' explanation of the meaning of path coefficients is recommended to the puzzled historian. In a nutshell, the path from variable A to B measures the maximum direct casual impact A has on B. If other variables could be added, the old paths could only be smaller. The indirect impact of A or B consists of the product of the paths from A to C and C to B. Arrows coming out nowhere indicate how important unknown variables were in casual terms (very important, usually!). Arrows can only go from left to right because of our recursive assumption (footnote 2). Missing arrows indicate that the path was very weak--below about .06--

and statistically insignificant. See Herman J. Loether and Donald G. McTavish, Descriptive Statistics for Sociologists (Boston, Allyn and Bacon, 1974), pp. 306-40.

6. See for example Baldwin, Farm Children, passim; Lee Soltow, "The Economic Heritage of an Iowa County," Annals of Iowa, 43 (1975), p. 24; and Daniel J. Elazar, Cities of the Prairie (New York: Basic Books, 1970), pp. 258-62, 355.

7. Jencks, Inequality; p. 225.

Chapter VI

Geographical Mobility in An Agricultural Society

Like racial and ethnic background, place of birth is also ascribed to an individual at birth. However, unlike ethnicity or racial characteristics which cannot be altered, migration provides the opportunity for people to leave their home enivronment to look for occupational opportunities elsewhere. Thus migration plays a similar function to education, with which it is very often combined, and it enables individuals to improve their lot, and "invest" in a move which will benefit their future lives.[1]

As we have seen, during the lives of the men in this study, the Iowa in which the majority were born, changed markedly. In the 1870's, when the oldest cohort was growing up, the railroads were only just beginning to push through the northwestern prairies, and though much of the remainder of the state was settled, there was the opportunity within Iowa itself for rural migration to new areas of settlement. But as the nineteenth century drew to a close rural fertility, though declining, was more than enough to cause employment dilemmas for farm children, so the younger cohorts were more likely to turn towards the cities than to remain on the land. The Iowa cities of Des Moines, Waterloo, Sioux City, and Cedar Rapids, all doubled in size between 1900 and 1925; and much of this increase was caused by rural-urban migrants taking up residence in urban areas. At the same time out-migration from the state quickened its pace, and between 1900 and 1905 the state actually lost population.[2]

This chapter is a retrospective analysis of the movement of individuals from about 1870 to 1925. Though a major portion of the study will be devoted to rural-urban migration, there is also a need to understand movement within the farm population itself, to appreciate the dynamics of the general redistribution of population in a largely rural environment, and to find out how the social structure of Iowa was affected by migration.[3]

Migration and Social Structure.

Contemporary studies have shown that non-farm migrants are on the whole more achievement orientated, they earn more, and have better jobs than men who have stayed in their home communities.[4] On the other hand, migration among farmers, modern research suggests, shows rather different patterns: non-migrants among farmers are more successful, they accumulate more land, and are economically in a sounder position.[5]

Many of the same patterns were to be found in Iowa fifty years ago. Let us first compare the characteristics of migrants and non-migrants classified by occupation and education. It seems clear from Table 6.1 that in Iowa migration was a mechanism of opportunity for professionals--doctors, lawyers, clergy, and teachers--as in post World War II America. For with the exception of professionals, unskilled laborers, farm laborers, and petty proprietors, all other occupational groups were more stable than migratory. The state's economy was largely responsible for this. Urban Iowa was composed of central places which served the surrounding countryside. The mobile elements in the non-farm occupational structure worked in occupations which required re-location on several occasions during a lifetime. Every crossroads village had its merchants, its school, and its doctor; and every small town its full complement of

professionals and businesses, which, because of their dependence on the farm economy, were often precariously balanced between solvency and economic failure. At the lowest status level, the relative instability of unskilled laborers and farm laborers, was not surprising in that the latter were often young men maneuvering to take over their own farms, and the former were inclined to be migratory in any environment. In view of their numbers, and the stereotype of localism, it is important to notice that 46 percent of the farmers were movers. At the best of times farmers were never very fixed. The "agricultural ladder," the system whereby farm laborers might climb the ladder of occupational status to farm renter, to owner, and eventually to landowner, required movement around the countryside from farm to farm. Certainly the difficult economic conditions brought about by the deflation after 1920 had just begun to affect the farm community by 1925, and the data probably shows relatively more instability among farmers than there otherwise might have been. The other stable elements in the population, the managers and the more important businessmen, the low status white collar workers, and the skilled and semi-skilled blue collar workers, were all in occupations which, in the small town environment, were more likely to be held by native sons than by outsiders. The businessmen earned their living in family firms, and the blue collar workers obtained their jobs through kin ties, union connections, friendship, and an intimate knowledge of the available job openings in the immediate vicinity. Unlike the nineteenth century, therefore, where higher status was often an indicator of stability, the Iowa record shows a more complex phenomenon.[6] To a considerable extent this was due to the importance of agriculture in the economy which had a bearing not only on the careers of farmers, but also on a large segment of the whole occupational structure of Iowa.

Table 6.1

Migratory Behavior, Iowa, 1870-1925

Occupation in 1925

	Migrants	N
Professional	78%	96
Manager	37%	86
Farmers	46%	1501
Small Prop.	51%	245
Low White Collar	43%	143
Skilled Craft	37%	253
Operators	48%	254
Laborers	59%	277
Farm Laborers	70%	78
N		2893

Religion

	Migrants	N
High Status Prot.	45%	225
Low Status Prot.	48%	847
Catholic	39%	488
Lutheran	47%	376
Prot. unspecified	53%	225
No Religion	48%	736
N		2897

Ethnicity

Old Stock	51%	1663
German	45%	661
Irish	43%	271
Scandinavian	39%	220
Other N. Europe	60%	55
Eastern, Southern Europe	45%	88
British	43%	198
N		3158

Age in 1925

Under 25	52%	110
25-34	51%	634
35-44	51%	692
45-54	51%	703
55-64	43%	554
Over 64	33%	430
N		3113

Education

8 Years or Less	47%	2290
9-11 Years	46%	364
High School Graduate	40%	215
Some College	53%	177
College	70%	66
N		3112

Note: Migrants are all those men who were in a different minor civil division at Childhood or later in the life cycle.

Source: Sample Data.

Educational attainment was one of the instruments with which achievement orientated Iowans, especially farmers' sons, climbed on the escalator to middle class status in the cities and towns. However, owing to the dispersed nature of the rural population, the almost total reliance on rural one room school houses with low standards of teaching, and the reluctance of the rural population to support consolidation for cultural and financial reasons, a satisfactory academic education in much of Iowa was often a question of the availability of facilities, and the strength of desire on the part of parents and children to make the necessary sacrifices to pursue education past the eighth grade.

For this reason education only affected the migratory behavior of the relatively well educated; among those lacking a high school diploma movers and stayers showed similar patterns. Among high school graduates as a whole, differentiation was also slight. However, with those who had just obtained a high school diploma, there was a tendency for men to be stable. This was a reflection of the availability of secondary education in the smallest of villages, and in turn showed that a high school diploma was an adequate enough credential for those who were involved in supervisory capacities in commercial activities in urban Iowa. A college education, on the other hand, in the absence of community colleges in the state, required an initial move from home, which in turn lessened the chances of a return to the home environment once formal education was completed. This was especially true of college matriculates from farm homes, who outnumbered students from other backgrounds.

Ethnicity and religion were also correlated with migratory behavior. Even though all ethnic groups with the exception of the "other North peans;" were relatively stable, when religion was introduced into the analysis, a more intricate pattern emerged. While only "unaffiliated

Protestants" showed a greater propensity to migrate--the vast majority were old stock Americans--Irish and German Catholics, like Scandinavian Lutherans, showed a remarkable reluctance to move from a familiar environment. They were groups in small enclaves surrounded by more Heterogeneous populations. Their relative lack of mobility can probably be explained by their preference to live in predominantly ethnically homogeneous localities, combined with the limited choice of communities to which they wished to move. In general, then, ethnicity and religion were pointers to the most stable elements in the population, not the most migratory.

Without question, age was a major factor in the movement of Iowans. However, the research design of this study prevented the determination of the exact time of migration of sample members. The most migratory group in any society--unmarried males and females under 24--were virtually eliminated from the sample because it concentrated on household heads. Be this as it may, with the exception of the very youngest cohort, who by virtue of their being heads of household at a young age were rather untypical of this age group, a simple age gradient emerged. The younger cohorts were unstable, while the older they became, the more stable they grew. This result also needs some words of explanation. For while members of the older cohorts did not move between 1870 and 1925, it is quite possible that they took part in the settlement process with their parents. For our purposes, though, since they were teenagers they had remained in the same locality.

While it is tempting to suggest that migrants in Iowa tended to be younger men who were better educated, who were old stock, had an American Protestant religious affiliation, and often had high occupational status, men who fitted <u>all</u> these criteria were a comparatively small group.

Instead the interrelationships of various groupings clouded the picture, so that stark divisions were difficult to underline.

Patterns of Geographical Mobility in Iowa

In a study which reanalyzed aggregate patterns of migration from published sources in 1895, Conzen found that despite the rural nature of the state, about 20% of all movement in Iowa was directed towards urban centers.[7] While migration streams were predominantly westward and northwestward in thrust conforming to the general settlement of the state, most movement was local in nature. The urban centers recruited migrants from their hinterlands, and inter-country rural migration was predominantly local also.[8] Although Conzen's material was valuable in gauging overall patterns, and especially inter-county and intra-county to urban movement, the published materials were not detailed enough to indicate the patterns of migration between different types of communities.

Movement in any rurally orientated society should normally conform to one or two distinct patterns. The first is classic rural to urban movement, or "urbanization," a common phenomenon in modernization. The flow of movement follows a direction from less industrialized communities to more industrialized, or from small communities to large ones. The second, and one which is probably more important in Iowa, is circulation between communities which resemble one another. Farmers, for example, following the criteria of the agricultural ladder, are much more likely during their early and middle years, to move to other open country neighborhoods, than to become urban migrants. The "theory of resembling environments" suggests that individuals adapt in their formative years to the type of environment in which they are living, and if they move,

they will, more often than not, choose a similar type of community.[9] In an overwhelmingly rural state in which agriculture was as modern as anything else, the latter schema would seem to be the most usual. Obviously, however, not all farmers move to open country areas, and not all villagers move to other villages. Farmers did move to villages, towns, and cities on retirement, and when forced off the land by disadvantageous circumstances. The integration of the state as one economic one unit regardless of the type of the community, gave rural people a greater choice in their destinations, provided they did not insist on ethnic enclaves. Of course, Iowa cities were not large in the first place, but the relative lack of differentiation in destinations is comparable to modern returns which show that rural-urban migrants are far less likely to move to metropolitan areas than to places under 50,000. In Iowa as in post World War II America, farmers were more likely to migrate to places classified as rural non-farm, i.e. communities of less than 2,500 in population[10].

Figures 6.1 through 6.3 attempt to pull these kinds of migration patterns from material gathered from the sample. In this case each Figure represents three different types of environment found in Iowa in 1925: open country or farm, villages and trading centers, towns and cities. Each row corresponds to the amount of movement that individuals made between their youth and 1925, and the columns indicate the place of residence at childhood, in 1915, and in 1925. (Because of the overwhelming amount of rural-urban migration, non-farm places of origin are all classified as "urban" in order to simplify analysis with very small n sizes.)

In view of the usual heavy turnover in cities it was surprising that they were able to retain their populations more satisfactorily than

any other ecological area. Otherwise only in open country townships did half the population remain in the same community from childhood onwards. The stability of the cities was caused by the pronounced increase in population during the period which made it unlikely that the more established residents would move elsewhere because their seniority as regards the newcomers gave them advantages in occupations and housing. Smaller communities (villages and trading centers) were less stable because the farm population moved or retired to them more often than to the cities.

Among farm residents in 1925, 21% had spent their childhoods in different communities than the census takers found them in 1915, but had not changed their place of residence since then. However, 18% of farmers were two-time movers--they had grown up in a different community from which they lived in 1915, and had moved again before 1925. Villages were the most unstable of the various types of community in Iowa. Their function as retirement places, and marginal business localities caused this instability. Trading centers acted in a similar capacity but their larger base added to their stability. As far as the bigger cities and towns were concerned, there was a certain amount of rural-urban migration, but unlike the smaller communities the relative lack of movement between 1915 and 1925 would indicate that this movement was occurring quite early in the life cycle, producing a younger migratory population than in villages and trading centers.

The universal tendency for migration to flow from rural areas to urban was necessarily found in Iowa because of the shortage of new farms. But while Iowa farming might have proved attractive to urbanites, few men moved from urban to rural localities. Overall the data suggest that movement came fairly early in the life cycle from the countryside to the larger towns and cities, and fairly late in the smaller places

Figure 6.1: Farm Destinations

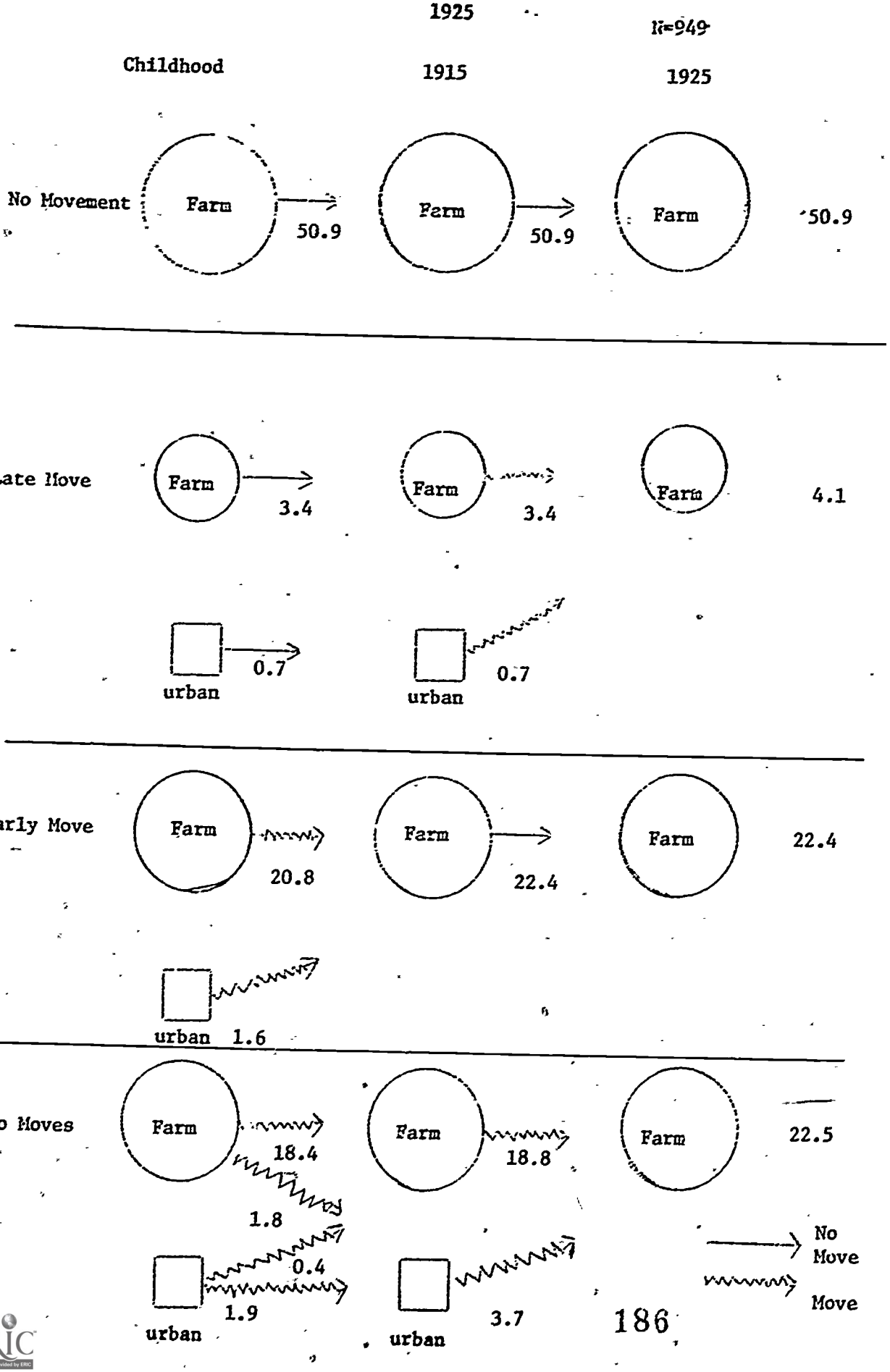


Figure 6.2: Village/Trading Center Destination, 1925

N=317

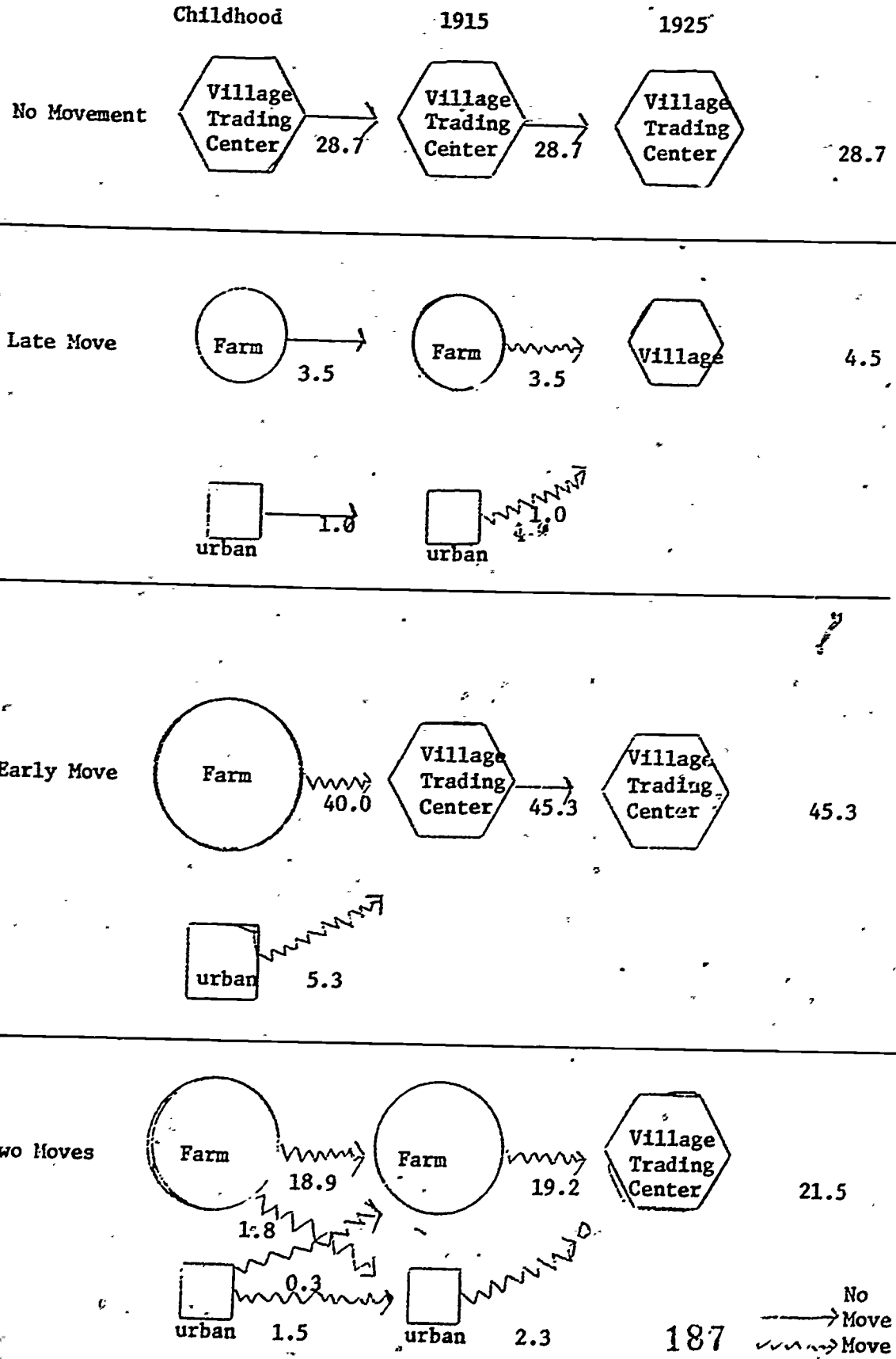
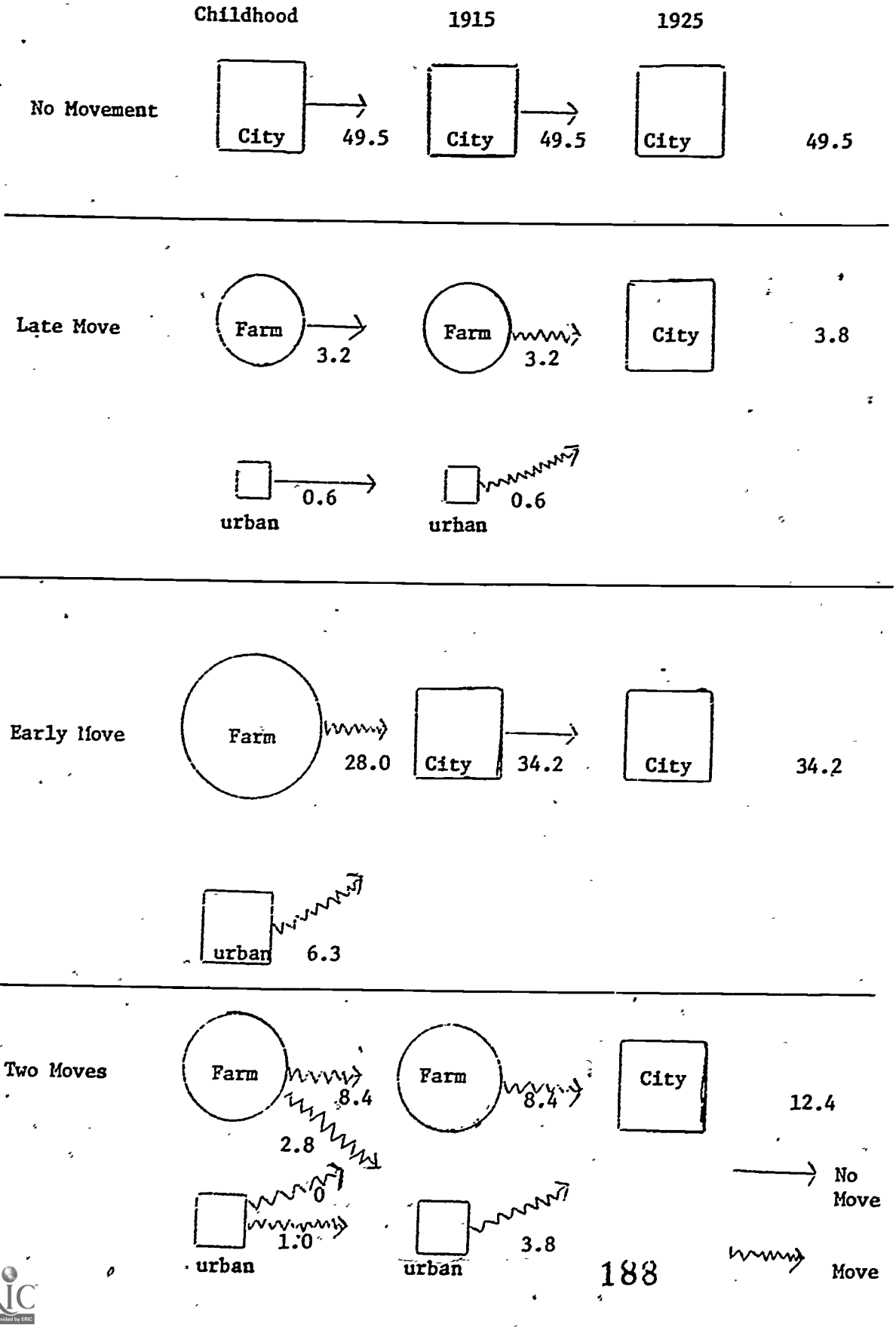


Figure 6.3: City Destinations
1925

N=622



that harbored retired farmers. Three main streams of migration were detected: the movement of farmers from one base of operations to another; the movement of retired farmers to urban areas; and the urban trek of young rural men and unsuccessful older farmers. Movement between "urban communities" was present, but insignificant.

Taking the state as a whole, though, the migratory habits of Iowans were almost as likely to be directed outside the state boundaries, as inside them. Did the more illusive out-migrants from Iowa conform to the kinds of patterns seen in the intra-Iowa movement of individuals? Table 6.2 shows the residences of out-migrants from Harrison County, Iowa, in 1905. Although there is no way of calculating the biases of this particular source, it provides a rare insight into out-migration patterns from the rural midwest. Harrison, one of the counties from which a rural sampling point was chosen for this study, is situated on the Missouri River in the extreme western part of the state. The county was almost totally rural in 1905 except for one town of 4,000 inhabitants. Only 25 miles to the south, the Omaha-Council Bluffs metropolitan area provided an urban environment which was both easily accessible, and economically inviting, for those who contemplated out-migration. Nevertheless, in spite of the proximity of a large urban center, only about ten percent of the former Harrison County residents had moved there. Indeed, if we include all the California and Pacific Northwest destinations in the urban camp--and some undoubtedly were not-barely 40% moved to urban areas. Instead the majority migrated westward to rural areas within a 300 mile radius of Harrison. In fact a good number remained in the local area: across the river in Nebraska; in northwestern Missouri; or if they remained in Iowa itself, on farms and in small trading centers within 40 miles of Harrison--usually in the neighboring county.

Table 6.2

Out-Migrant Destinations
Harrison, County, Iowa 1905

Rural Iowa	17.8%
Rural Nebraska	15.5
Council Bluffs	6.2
Omaha	4.6
Sioux City	2.1
Large Cities West	2.6
Large Cities East	2.0
Small Towns West	2.6
Small Towns East	0.5
California	3.9
Pacific Northwest	7.9
Rural Ill., Minn.	4.0
Rural Kans., Mo., Okla., Colo.	30.3
N=	1229

Source: W.H. Hawkins, Directory of Harrison County, Iowa (Logan: 1905) pp. 383-400.

While these data do indicate a certain rural bias to the chosen destinations of a population which was predominantly of farm origins, the non-specific nature of the backgrounds of the ex-Harrison County residents, prevents a detailed investigation of movement between resembling environments. For a more thorough test of this phenomenon, let us use some more non-sample materials to test movement between similar or dissimilar communities. The data comes from a study which traced the movements of young men who graduated from the 8th grade between 1927-28 in the central Iowa county of Story. Table 6.3 illustrates well the kind of step-wise progression of the movement of individuals away from their native environments. Farm boys in this case were a shade more stable than city boys; but if they did migrate, they were more likely to relocate in communities in the state which were under 2,500 in size, and even less likely to leave Iowa altogether. Alternatively, young men from villages and cities left the state in about equal numbers to move to metropolitan centers such as Chicago, Los Angeles, or Kansas City. But if they remained in Iowa, they tended to move to a community with a similar environment to that of their own home town. In most cases this usually constituted a short distance move--for over 60% who migrated to other towns and cities in Iowa, remained within 40 miles of their place of origin.

City-Ward Migration in Iowa

"The United States," wrote Richard Hofstadter, " was born in the country and moved to the city."[11] While historians have not systematically explored this phenomenon, one of the major themes in rural sociology since its founding as a discipline has been the analysis of rural-urban

Table 6.3

Migration Patterns of 8th Grade Boys
Story County, Iowa 1928-1941

	Type of Migration				
	Stay at Home	To Towns[a]	To Cities[b]	To Other States	Total
Farm Born	55%	10%	14%	16%	190
Village Born	29	12	26	33	76
City Born	44	3	22	32	108
N					374

a Towns less than 2,500 population
b Cities with more than 2,500 population

Source: J. Morris Christy, "Education and Present Occupations of Story County 8th Grade Male Pupils of 1927-28," (Masters Thesis, Iowa State College, Ames, 1942)

migration. Whether scholars worked in the 1920's, the 1930's, or the 1950's, a principal thrust of research concerned the shift of rural people away from the countryside. This concern stemmed from the turn of the century when rural America began to be on the defensive against the influence of the city. "The rural problem" largely centered on the nagging fear that the country was losing the best of its population to urban American. At the 1916 meetings of the American Sociological Association, for example, the whole program was devoted to papers which attempted to analyze the plight of rural America. One of these papers, by the sociologist E. A. Ross, even went as far as to blame rural deterioration almost entirely on the cityward migration of young people.[12] Ross thus started a trend which eventually culminated in the Depression years when substantial sums of money became available for sophisticated and detailed studies of migration within and from open country neighborhoods.[13]

In the 1960's research at the national level showed that in general, rural folk were not well prepared for careers in urban America. In comparison to those born in the city or in smaller urban communities, those born in open country areas had significantly lower occupational status, earnings, and educational attainment. The poor performance of both black and white migrants in cities in 1962, can be attributable to background factors such as a poverty stricken childhood, or discrimination in educational opportunity, or a combination of both.[14] Some historical and sociological research, on the other hand, has found that individuals with rural backgrounds in certain areas of the country have competed very adequately with urbanites in the city. For example, in Boston in the late 19th century old stock rural migrants fared unusually well in comparison to migrants.[15] To be sure, rural Yankees in a city environment were rather a special breed, but a similar trend was noted by Rogoff

nearer in time and space for our Iowa study. In Indianapolis in 1910 farm youths were also able to make headway in the city against those from different backgrounds.[16] In a Minnesota study published in 1926, 60% of all rural youth surveyed left the open country. Of these 23% took unskilled jobs in the towns, 14% became artisans, 10% were low status white collar workers, 3% owned businesses of their own, and 10% became professionals.[17] A more sophisticated study conducted in Des Moines in the 1960's which compared rural-urban migrants, urban non-movers, and inter-urban migrants, found no essential differences between the three groups when various background factors were controlled.[18] It would seem logical to follow this last analysis as far as our data will permit, and compare the performance of men with different backgrounds in the towns and cities of Iowa in 1925.

All those in Table 6.4 with rural backgrounds had fathers who were farmers, so that as the first generation in the town or city they were competing with those who were at least second generation urban dwellers. On the one hand these new urbanites provided proportionally as many white collar workers as the inter-urban movers, and more professionals than the urban born who were also non-movers. On the other hand they also had a greater representation among the lowest status ranks. This dichotomy came about because of the two different streams of migration which brought rural people to cities and towns. One was composed of young people seeking higher educational opportunities where there were none at home. Having finished their education they made careers for themselves in business and the professions, and rarely returned to the farm. The other stream was composed of rural-urban movers who had, for the most part, been forced off the land either through lack of opportunity, or because they had failed in farming. These data seem to uphold the

Table 6.4
Iowa Urban Dwellers, Their Origins and Occupations (read across)

	Prof.	Mgr.	Farmer	Prop.	Wh Coll.	Craft	Op.	Lab.	Fm Lab	N
Rural-Urban Movers	9%	5%	14%	15%	6%	11%	16%	20%	1%	450
City Born	4	8	6	15	14	19	19	14	1	428
City Born Movers	11	4	2	13	7	17	23	13	1	97

Note: 2% of Rural Urban Movers had no Occupation
1% of City born Non-Movers had no Occupation
1% of City born Movers had no Occupation

Source: Sample Data

view that selective migration did siphon off certain individuals from the country with more potential than others who could compete well with the urban reared. But at the same time the country lost a larger proportion of less talented men.

However, it was the inter-urban movers in Iowa cities, as has been found in contemporary situations, who were the most successful when occupational achievement was measured. Like the more ambitious rural-urban migrants they had a special aptitude for change, to such an extent that they surpassed the urbanites who had not altered their place of residence. In addition when earnings and educational attainment were analyzed, the differences between the occupational groupings were confirmed. Inter-city movers had proportionally more high school graduates, and their earning power was also greater than the other two groups. (Table 6.5)

Although rural-urban movers showed less achievement orientation than men born in other urban centers and who had moved to other cities and towns, their performance compared well, as we have seen, with Minnesota men from similar environments. Clearly for a number of these men with rural origins high educational aspirations had much to do with their success. This is shown in the path analysis which compares rural-urban movers with urban non-movers.[19] Exactly the same procedure was adopted as in Chapter V, only in this case the results were stronger because we were dealing with two populations with more homogeneous backgrounds. In Table 6.6 the key correlations were between education and occupation in the case of the rural-urban movers, and between the respondent's occupation and father's occupation for the non-movers. While both groups had precisely the same average amounts of schooling, the variance between the rural-urban movers was greater which allowed the high correlation between occupation and education. Perhaps more important from the point

Table 6.5

Mean Earnings, and Mean Education and Type of Migration, 1915

Type of Migration	Earnings	Years of Education
Inter-Urban Movers (N=97)	$1311	9.7
Rural-Urban Movers (N=450)	1040	8.6
Urban Non-Movers (N=424)	917	7.9

Source: Sample Data

Table 6.6

Zero-Order Correlations for Occupational Mobility Model, Rural-Urban, and Urban Non-Movers

Rural-Urban Movers
1915

	Fa. Occ.	# of Sibs	Educ.	Occ.	Inc.	Mean	S.D.
Fa.Occ.	-	-.043	.121	.161	.094	6.50	1.36
# of Sibs	-	-	-.101	-.112	.051	3.86	2.09
Educ	-	-	-	.586	.315	8.67	3.68
Occ.	-	-	-	-	.382	6.32	2.57
Inc.	-	-	-	-	-	$1054	$1429

N=177

Urban Non-Movers
1915

	Fa. Occ	# of Sibs	Educ.	Occ.	Inc.	Mean	S.D.
N=122							
Fa. Occ.	-	-.195	.311	.381	.349	5.68	2.49
# of Sibs	-	-	-.198	-.115	-.118	2.99	2.13
Educ.	-	-	-	.409	.386	8.67	2.54
Occ.	-	-	-	-	.523	6.00	2.26
Inc.	-	-	-	-	-	$868	$584

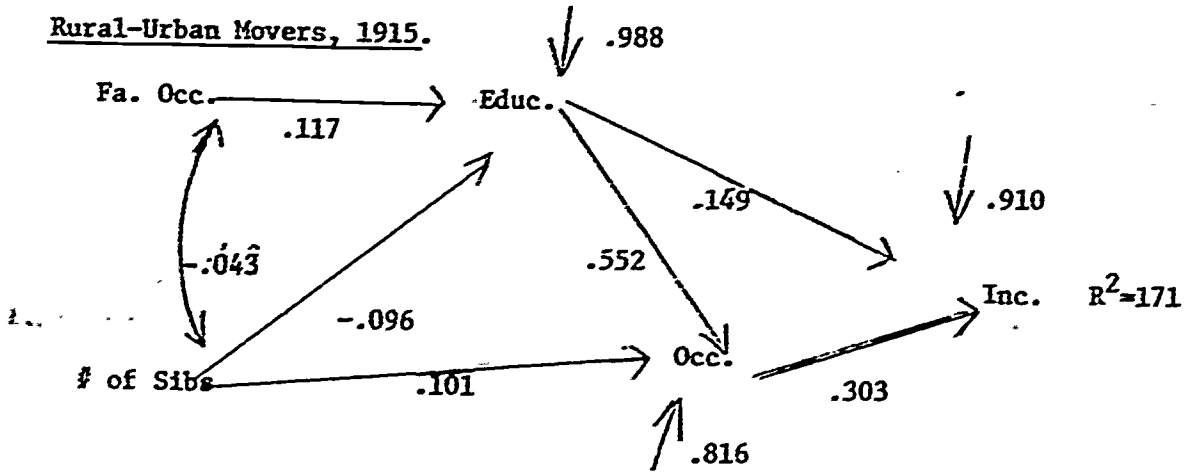
Source: Sample Data

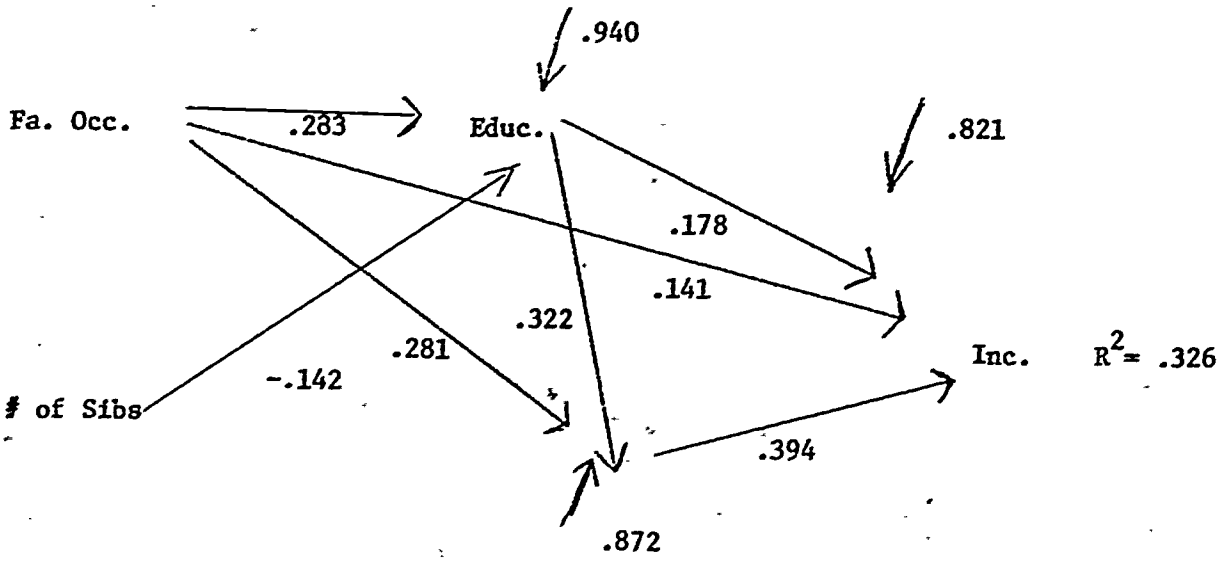
of view of the study as a whole the high correlation between a father's occupation and that of his son showed that among urban non-movers ascribed characteristics were still important as far as social mobility was concerned. This is seen most clearly in Figure 6.4 which displays the path coefficients of both groups. Among rural-urban movers fathers' occupation had little effect on either education or occupation; on the other hand with the urban non-movers the occupational status of a father was an important factor in predicting both education and occupation. In addition it was noticeable that in comparison to the analysis of the total urban population in the previous chapter the variance explained for both groups showed marked improvement. This was derived principally from the powerful effect of education among the farm born men, and the transmission of status among those who had spent all their lives in towns and cities.

While these patterns add to our understanding of the overall picture of occupational mobility among select groups of Iowans, let us once more return to the specific case of the rural-urban movers and compare the backgrounds of the highest achievers, the professionals, and those with the lowest status, the unskilled laborers. As Table 6.7 shows, though professionals tended to have fathers who were farm owners, there was no great difference as far as land tenure was concerned. Professionals came from smaller families, and were more likely to be younger sons; however, none of these characteristics were crucial in any explanation of achievement. More pertinent was the fact that laborers were more inclined to hail from southern Iowa with its poorer environment, and were less likely to be religious. As 25% of professionals came from high status protestant backgrounds, and they were a group which was highly motivated towards achievement, and especially educational attainment,

Figure 6.4

Path Diagram Occupational Model
Rural-Urban Movers, Urban Non-Movers
Iowa, 1915.





Source: Sample Data.

Table 6.7

Characteristics of Professionals, and Unskilled Laborers, Rural-Urban Migrants

	Laborers	Professionals
Born in Southern Iowa	37%	12%
Father Farm Owner	63%	80%
Number of Siblings	4.07	3.60
% of Younger Sons	22%	35%
Mean Educ. in Years	6.6	15.3
% of no Religious Affiliation	37%	9%
% Protestant	49%	76%
% High Status Protestant	2%	26%
% Catholic	10%	9%
N		54%

Source: Sample Data

the cultural, and not just the economic environment in which a man grew up, would seem to be important for success in urban conditions for someone with a rural background.

Farm Geographical Mobility

With the exception of a triangle bounded by southern Polk county in the north, by Page in the southwest, and by Van Buren in the southeast, and a few scattered counties such as Jackson, Clayton, and Harrison, much of the remainder of Iowa is either rolling or flat prairie with good, if not excellent, soil. In three townships in our sample the mean farm value in 1915 was over $30,000, and only in the southern triangle and in one township in Jackson county did farm values dip below a mean of $10,000. Furthermore, one of our townships was singled out by a rural church survey as being an example which other less fortunate communities might emulate.[20] The legacy left by the prosperity of the golden age of agriculture can still be seen along rural roads in the state where much of the farm architecture, the country churches, and many of the stores and homes in the villages, stem from this period. Apart from the problem of soil erosion which was already raising headaches in southern Iowa counties where river valleys were vulnerable, there was little reason for Iowa farmers to move from the countryside because of poor land.

Indeed, as the careful work of Bremer has shown, periods of farm prosperity were more likely to produce mobility within the farm population itself, than years of stagnation.[21] While there is no time series data available to show whether persistence rates changed according to economic conditions in the sample townships, survey data from the Depression of

the 1930's in Iowa indicates that the communities were often stable, and that young people actually returned from the towns and cities to their home neighborhoods because of the depressed nature of the urban sector.[22] Although the 1921 recession seriously embarrassed those farmers who had gambled in farm real estate, the economy up until 1925 remained buoyant enough to encourage farm migration patterns which had similarity to those between 1897 and 1920. In fact this particular economic downturn probably encouraged greater movement. For with the increase in corporate ownership, the loss of farms by those who had overextended themselves, and the expectations that the economy would revive, competition for good land at lower rents and lower prices encouraged continuous turnover of farm operators.[23]

As the data shows which compared farm movement with that of other occupations, most farm owner and farm renter migration was local. (Table 6.8) The modal distance for all farmer moves (except movement within a township) was less than ten miles, which was usually a move from one adjoining township to another. Farm migration followed lines which were geared to farm availability both within the family, and within the neighborhood. It seems fairly clear that although some of the older sample members travelled three hundred miles or more from the eastern river counties to begin homesteading the rich northwest Iowa prairies, most of this migration occurred before 1890. Spillman indicated that it was comparatively rare for men to make all the moves up the "agricultural ladder" by the second decade of the 20th century.[24] However, the greater distances travelled by farm laborers, would indicate that younger men were still required to move some distance from home in order to begin a career. More common was for farmers' sons to work on the home place initially and then begin scouring the immediate area for

Table 6.8

Distance Moved by Occupation

Occupation	Mean Distance in Miles
Professionals	102 (96)
Managers	22 (86)
Small Proprietors	53 (245)
White Collar	37 (143)
Skilled Craft	37 (253)
Operator	58 (254)
Laborers	48 (277)
Farm Laborers	41 (78)
Farm Owners	25 (728)
Farm Renters	34 (777)

Source: Sample Data

likely places of operations. Their knowledge of local conditions and openings, the relative ease in piling up a farm wagon with belongings and driving animals a short distance before planting season, obviously was a simpler method of gaining an acreage than plunging halfway across the state to unfamiliar territory. Interviews conducted after our period in 1937 showed 57% of the farmers were living in the county where they were born, including 59% of the owners, 58% of the tenants, and 44% of the farm laborers. The great majority, 70%, had lived in one or two areas their entire lives. While only 17% had never moved at all, the average move was only five miles. On the other hand, a footloose minority accounted for most of the migration. The most mobile quarter of the farmers accounted for 60% of all movements, both long and short distance. Looking at only those longer moves that involved changing counties, a tiny group, 8.5% of all farmers, accounted for 60% of the moves. These people may have had a lot of varied experience, but their failure to find a secure niche indicates an inability to cope with the details, the heartaches--and the neighbors--that were central to the experience of agricultural success. Among corn belt tenants in 1937, three-fourths wanted to buy a farm, but only one in six thought their prospects for actually getting one in the next five years were "good."[25]

Farmers in general were exceptions to the rule that migrants were more successful economically than non-migrants. In Iowa the stable farmer was more likely to accumulate real estate. As Table 6.9 shows, farm value, acreage, and tax assessments were all balanced in favor of farmers who were stable. The fact that migrants had the edge in livestock production was probably a reflection of the preferences of younger men who were concentrating on intensive cattle and hog raising in order to generate as much capital as possible to purchase land.

Table 6.9

Migration and Farm Wealth

	Mover	Stayer
Farm Value, 1915	$16,959 (N=181)	$19,960 (N=330)
Mortgage, 1915	6,158 (N=103)	5,534 (N=160)
Acreage, 1925	140 (N=174)	152 (N=341)
Tax Assessment, 1925	1,245 (N=342)	1,734 (N=400)
Livestock Value, 1915	2,272 (N=273)	2,269 (N=481)

Source: Sample Data

While it was shown earlier that farmers were more often stable than migratory, what factors produced stability among the farm population? Although age was to some degree important—inevitably the younger a man was, the less stable he proved to be—education had hardly any bearing on the stability of rural population. Instead, religion and ethnicity proved to be better indicators of mobility. Earlier, Catholics were identified as a core stable group in the general Iowa population—this was even more obvious among farmers. German and Irish Catholic farmers were twice as likely to be stayers as movers; but the reverse was true of old stock men with Protestant affiliations, and German Lutherans. In Protestant Iowa, German Catholics with their emphasis on property accumulation and large closely knit families showed more traditional behavior than did other ethnic groups. As Horace Miner showed in his study of a central Iowa county, Germans (in this case Protestants) believed in strong paternalistic families. The whole family worked towards the accumulation of additional farms which were given to sons when they came of age. The Yankee farmers looked askance at this behavior, and to them the German father was perceived as a "Teuton working his family to the bone."[26] Our data would seem to support these kinds of patterns of stability and paternalism. (Table 6.10) For all Continental, Scandinavian, and Irish farming groups had, on average, larger property values than old stock farmers. In view of their more traditional attitudes it was surprising that they also had higher indebtedness than Americans. This was partly a result of their larger holdings in the first place, for land was used as collateral to invest in more land. Among old stock farmers there was much less emphasis on the renumeration of children. Instead they gave them independence of action, and hence more freedom to move away from home.

Table 6.10

Farm Value, Ethnicity, Religion, 1925

	Mean	SD	N
Grand Mean	$18897	$ $14852	784
Old Stock	16440	13386	224
No Religion	14014	11642	84
Low Status Protestant	17130	13758	114
Scandinavian	16651	10523	34
Lutheran	14811	7791	24
German	22585	16695	129
Lutheran	23808	15949	42
Catholic	22622	15319	40
Irish	21187	14106	53
Catholic	23348	14115	40

Farm Mortgage, Ethnicity, Religion, 1925

	Mean	SD	N
Grand Mean	$ 5669	$ 3218	420
Old Stock	5759	9953	121
No Religion	4451	4369	45
Low Status Protestant	6793	3597	57
Scandinavian	6013	4530	22
Lutheran	5968	4762	16
German	6523	5772	67
Lutheran	6353	4860	26
Catholic	6885	5497	14
Irish	5820	5328	30
Catholic	5277	4085	22

Source: Sample Data

Settlement patterns also assist in explaining the differences in behavior between old stock and ethnic farm operators. For the most part old stock Americans had settled in the southern triangle where farming was less profitable. Ethnics, with the exception of those in the northern Mississippi river counties, settled in the less hospitable north, central, and northwest. There, while in many instances the breaking of the prairie and its draining was a major undertaking, once done, farming proved highly profitable.[27] Therefore, there was every reason for ethnic farmers to remain in their enclaves, and for ambitious old stock Americans to turn citywards for education and join the urban middle class.

Conclusion

In nineteenth century America rural migration west of the Alleghenies was predominantly westward in thrust, with farmers leap frogging to new frontier areas always in search of more favorable conditions. With the filling of the frontier and the comparatively high fertility rates among farmers, urban areas provided an alternative haven for an excess rural population.

Although commentators in the late 19th and early 20th centuries expressed fears that the countryside was losing population to urban centers, as our material showed, rural-urban migration was a good deal more complex. The unspecific nature of the assertion that rural America was moving to cities in large numbers, failed to take note of how the migration process took place. In general rural folk were reluctant to move away from a familiar environment which, in view of the relative prosperity of agriculture after 1900, was a natural reaction. This did

not mean that movement for farmers over the life cycle was not common. For while the agricultural ladder did not work as efficiently in the 20th century as it had done in the 19th, the very nature of the farm inheritance process, and a system which relied on the family farm as the basic unit of production, required a certain amount of movement between neighborhoods, townships, and counties. On the whole most of this farm migration was very local in nature, often to the next township only.

In Iowa movement from the farm essentially conformed to three different patterns, but all retained a certain amount of contact with the country. These patterns were composed of the movement of retirees to retirement centers, the migration of young and middle aged men into low status occupations in the cities and towns, and the movement of young people for secondary and college education, and then into high status occupations. On the surface the movement of these achievement orientated people was a loss to the countryside. But in Iowa, and in other rural states, with the integration of the economies of rural and urban areas, these men were recruited into occupations which in the long run benefited rural areas. The farm boys, preferring to remain close to the land, became country doctors, and lawyers, agricultural experiment station workers, and employees of agri-business, thus permitting direct access and influence upon rural life. Many of those Iowans in low status jobs in the cities who had migrated from the country often did part-time work on farms. And retirees also retained contact with the country, through kin ties, and ownership of farms leased to tenants.

While the migration of farm boys who attained high status occupations in the towns and cities has rarely been documented before, perhaps our most important finding concerned the comparative rigidity of the social structure of urban Iowa among those who were non-movers. For without

the rural-urban movers, background became more vital in predicting education, and in turn occupation and status, among town and city-bred Iowans. Our next chapter deals with one specific group, the teachers, who not only were highly mobile, and used migration in the classic sense to achieve a more satisfactory position, but also, though achievement oriented, were frustrated by the cultural constraints in which they had to work.

Notes - Chapter VI

1. Theodore W. Schultz, Investment in Human Capital (New York: The Free Press, 1971), pp. 29-30; Donald J. Bogue, Principles of Demography (New York: Wiley, 1969), chapter 19.

2. Out-migration from Iowa is conveniently summarized in Leland L. Sage, A History of Iowa (Ames, Iowa: Iowa State University Press, 1974), p. 218. For more details, see Everett Lee et al, Population Redistribution and Economic Growth (Philadelphia: American Philosophical Society, 1954), vol. 1, pp. 107-231.

3. Although the following analysis covers a "classic" period of rural-urban migration in the American past, there are inadequacies in the data which prevent a completely realistic understanding of the problem. For example, the materials available only allowed a limited number of chances for the "capture" and "recapture" of sample members. In the space of fifty years, most individuals were found only twice, or at most three times over the life cycle. Consequently any definitive exploration into "repeated" migration, or short distance migration from childhood home in a series of moves to a residence in 1925, was impossible. We could have explored short distance annual movement within cities using city directories, along the lines of Howard Chudacoff, Mobile Americans: Residential and Social Mobility in Omaha, 1880-1920 (New York: Oxford University Press, 1972), but that route seemed unpromising. In addition, because this study used a sample and threw its net widely, kinship

ties, and chain migration--always key factors in the migration process--also were ignored. Perhaps even more fundamental was the fact that the research design obviously precluded any chance of exploring inter-state migration except for those moving to Iowa before 1925. A migrant here is defined as any individual who lived in a different township, village, town or city, than in 1925, and a non-migrant as someone who was found in the same community at all observation points. Those Iowans who were brought either from Europe, or from another part of the country as young children, and who did not move again from the minor civil division in which they grew up, were classified as non-migrants. For the advanced mathematics of capture-recapture techniques, see Yvonne Bishop, Stephen Fienberg and Paul Holland, Discrete Multivariate Analysis (Cambridge: MIT Press, 1975), chapter 6.

4. Blau and Duncan, The American Occupational Structure, pp. 257-259.

5. Ibid., pp. 277-294.

6. See, for example, Peter R. Knights, The Plain People of Boston, 1830-1860: A Study of City Growth (New York: Oxford University Press, 1971), pp. 107-108.

7. Michael P. Conzen, "Local Migration Systems in 19th Century Iowa," Geographical Review, 64 (1974), p. 360.

8. Ibid., p. 348.

9. For an extended treatment using Swedish data see Jane Moore, Cityward Migration (Chicago: University of Chicago Press, 1938).

10. Blau and Duncan, The American Occupational Structure, p. 283.

11. Richard Hofstadter. The Age of Reform: From Bryan to F.D.R. (New York: Knopf, 1955), p. 23.

12. E. A. Ross, "Folk Depletion as a Cause of Rural Decline," Pub Publications of the American Sociological Society, 11 (1917), p. 21-30.

13. The most important work for the middle west includes: Ray E. Wakeley, "Differential Mobility Within the Rural Population in 18 Iowa Townships, 1928-35," Iowa Agricultural Experiment Station Bulletin 383, Ames, 1938; W. F. Kumlein, Robert L. McNamara and M. Bankert, "Rural Population Mobility in South Dakota, 1928-1935," South Dakota Agriculture Experiment Station, Bulletin 315, 1938; C. E. Lively and Frances Foott, "Population Mobility in Selected Areas of Rural Ohio 1928-1935," Ohio Agricultural Experiment Station, Bulletin 341, 1937; C. L. Philblad and C. L. Gregory, Selective Factors in Migration and Occupation (University of Missouri Studies, XVIII, No. 2, Columbia, Mo., 1943); and of course the pioneer historical study in this vein, James C. Malin, "The Turnover of Farm Population in Kansas," Kansas Historical Quarterly. 4 (1935), pp. 339-312.

14. Blau and Duncan, The American Occupational Structure, p. 278.

15. Thernstrom, The Other Bostonians, pp. 35-36.

16. Natalie Rogoff, Recent Trends in Occupational Mobility (Glencoe: The Free Press, 1953), p. 44.

17. Carl C. Zimmerman, "The Migration to Towns and Cities," American Journal of Sociology, 32 (1926), pp. 456-455.

18. Ward W. Bowder and Lee G. Burchinal, "Farm Migrants in the City," Iowa Agricultural Experiment Station Bulletin, 534, 1965.

19. Unfortunately the small number of inter-urban moves prevented a similar analysis of their patterns.

20. Benson Y. Landis, Rural Church Life in the Middle West (New York, 1923), takes Lone Tree Township, Clay County, Iowa, as an example of a progressive rural community.

21. Richard Glen Bremer, "Furrows Along the Loop: The Social and Economic History of a Great Plains Farming Region, 1910-1970," Unpublished Ph.D Dissertation, University of Wisconsin, 1973, pp. 248-262.

22. Wakeley, "Differential Mobility within the Rural Population in 18 Iowa Townships," passim.

23. William G. Murray and Ronald C. Bailey, "Corporate Owned Land in Iowa," Iowa Agricultural Experiment Station Bulletin, 307, 1935.

24. Spillman, "The Agricultural Ladder," p. 171.

25. E.A. Schuler, "Social Status and Farm Tenure Attitudes...," pp. 39-44, 69, 71, 177-190.

26. Horace Miner, Culture and Agriculture: An Anthropological Study of a Corn Belt County (Ann Arbor: University of Michigan Press, 1949), p. 43.

27. See Leslie Hewes and P.E. Frandson, "Occupying the Wet Prairie: The Role of Artificial Drainage in Story County, Iowa," Annals of the Association of American Geographers, 42 (1952), pp. 24-50; and Leslie Hewes, "Some Features of Early Woodland and Prairie Settlement in a Central Iowa County, Ibid, 40 (1951), p. 49.

Chapter VII

The Overseers: Teachers and Schoolboards

Iowa operated in effect, two school systems--a modern one for towns, cities and the most progressive rural areas, and a traditional one of the majority of farmers. The state was one of the last to finally consolidate and modernize its rural schools in the 1960's. No matter how often professional educators complained about the inefficiency and poor quality of learning in the traditional sector, the implicit ideology of democratic localism persisted throughout our period, buttressed by state laws that placed power in the hands of elected neighborhood school boards. The teaching force was divided between the two sectors, with the youngest, least educated and least career-oriented women concentrated in the poorly paid traditional sector. Some made the transition to the modern sector, usually through higher education; they found themselves in a far more attractive climate intellectually and financially, at the cost of breaking close ties with their family, and moving out on their own.

The Traditional Sector

In the first quarter of the 20th century Iowa had more one-room schools than any other state. Large atlases polka-dot the rural landscape with miniature representations of these buildings, a hundred or more for every county. Each school represented an independent local district controlled by an elected school board. In Cedar County, for example,

nearly a hundred farmers or their wives sat on these boards in 1923. Only ten percent had even any high school experience, and none were conversant with modern educational ideas. Rarely were local board elections exciting events, unless some spendthrift proposed buying a new stove, or adding a second privy to the schoolyard. Undoubtedly the board members reflected the mood of their neighbors, many of whom were relatives anyway. Dissatisfaction with school conditions was rarely voiced by the farm people, and ambition for their children rarely extended beyond a high school education.[1]

The parsimony of the school boards expressed itself in the condition of the facility and the salary of the teacher. Farmers who prided themselves on herds of fat cattle and hogs, high grain yields and large bank accounts were easily satisfied with dirty, dark, dank frame buildings for their offspring. There were no shrubs or flowers; the virgin prairie grass was cut once a year. The equipment for these institutions--in which hundreds of thousands of children received all their formal education--comprised a worn-out dictionary, some maps, 50 or 100 books, chiefly biographies, folk tales, nature lore; no poetry or civics titles, usually, but often some Shakespeare and government documents well beyond the ken of the small children. Few schools had playground equipment, though perhaps there was a punching bag stuffed with rags and used as a football. Sometimes the teachers were authorized to spend five or ten dollars a year for colored paper, modelling clay or the like. State law required the expenditure of a minimum of 5 cents per pupil, and a maximum of 15 cents, annually, for books. A well provided water, often unsafe; invariably the toilets were dirty, unsanitary and marked up with graffiti. This last characteristic bothered ministers and mothers a great deal, but the proponents of modernization had warned this was inevitable in such

backward places: "You ought not to be surprised at the outcroppings of vulgar thought, improper language, and vicious conduct—the forerunners of immoral and criminal ideas."[2] Still, the fathers tolerated it.

The teachers were no more outstanding than their surroundings. Five out of six were young single women, though an eighth were married or widowed; only 4 percent were men. By 1931, when conditions had improved considerably, 28 percent had not gone beyond high school, and another 54 percent had completed no more than a year of college. Before World War I, on the other hand, many district schools were taught by girls whose entire 8 years of education was at that school or one like it.

Nearly all of the teachers lived at home, or with relatives. The canny farmers saw to it that the compulsory school system provided employment for local girls. A sort of round-robin existed whereby one farmer's daughter would teach a year or two, then marry, or reluctantly surrender the post to the neighbor next in line. The genius of the system was that the salary the district paid would recompense farmers for their taxes. Throughout the first quarter of the 20th century, Iowa rural teachers were paid far below the regional or national average, even though the state's educational expenditure as a proportion of its wealth was among the highest in the nation. This anomaly stemmed from the inefficiency of operating so many small schools. A fourth had fewer than ten pupils.[3]

The quality of teaching invariably varied enormously. Some women, regardless of their training or experience, found it easy to explain arithmetic, or encourage little ones to practice their alphabet. But if they were really good, they usually moved on to the modern sector. Of 107 rural teachers in Cedar County the county superintendent judged

eleven to be superior, only 30 good.[4] Usually the teachers relied on rote drills and endless recitations to pass the time. They could hardly explain concepts they did not understand themselves. Fortunately for them, the parents measured the pupils' achievement almost solely in terms of ciphering ability, and that was relatively easier to teach than reading or grammar or science. The parents also expected the teachers to be disciplinarians; apparently some parents believed in miracles. It often strained the teacher's talents to the breaking point to keep the children quiet, especially the boys.

Nominally, the elected county superintendent of schools and the state superintendent had some responsibility for the quality of the rural schools. In practice, the district school boards were confident of their own ability to control the situation, and were constantly on the watch for any unwonted interference or proposals that might cost money. County superintendents did their best, visiting each school regularly, providing hints to the teachers and recommended syllabi, and conducting short training institutes.[5] Since few teachers tarried in their profession more than two or three years, these upgrading efforts had to be continuous, and could not have had much cumulative effect. The compulsory school law of 1902 was not enforced by truant officers in rural areas, and absenteeism averaged three weeks per year for the younger children, much longer for the able-bodied older boys.

State efforts to upgrade rural education focused in the 1910's on the encouragement of consolidated schools. Since only a small fraction of the rural districts had accepted this modernization approach by 1920, a subtler approach was used. Any rural school that stayed open 8 months, had 10 or more pupils, kept its building and outhouses in good repair, and hired a teacher with a bit of training, was eligible for state

subsidy. But only 10% of the rural schools accpted this intrusion into their affairs by 1925.[6]

Analysis of cognitive achievement is a tricky business, as raging arguments in the 1970's over IQ tests and the Coleman Report attest. Even more difficult is it to find out how much children learned a half century ago. The extraordinarily careful work of the Iowa Child Welfare Research Station in the 1920's, on whom we have relied for much of this chapter, indicates some of the failings of the traditional rural schools in comparison with the modern consolidated schools in Iowa. Rural children in the first two or three grades performed at par, according to the Stanford Achievement Test. As they "progressed" through the grades, however, they fell further and further behind. Thus in grades 2 and 3, 23% of the rural school pupils were below the norm, versus 73% of the pupils in grades 4 through 8. At the nearby consolidated school, 41% of the younger, but only 50% of the older pupils were below the norm. Both types of schools produced students who did well in arithmetic, spelling and nature study, and poorly in history and literature. But the rural students were also far below their age norm in reading and language.[7] These results applied to schools in the 1920's, when all the teachers were better educated than ever before. It seems plausible that earlier, when most of our sample farmers were educated, their average cognitive achievement, especially in reading, was well below the norms of urban Iowa.[8]

Our earlier findings remind us that economic achievement in later life was not measurably lowered by attendance at a one-room rural school compared to a more modern institution, other factors held constant. Too many fortuitous events or unmeasured factors intervened between sloppy teaching at age eight and income at age 40. But schooling is more than

a means to an end, it is an important experience in its own right. It is by no means clear that the advantages of walking a short way to a school your father, uncles and neighbors controlled outweighed the social and cultural isolation involved. Diaries kept by pupils attending one room schools "give the impression for the most part of a flat, monotonous life recorded by children who, if they had any introspective moments, were unable to put them into language." The typical boy or nine reported, "In the morning I done chores. Then went to school. When school was out I went home changed clothes. Done chores. Then supper. Then I went to bed." If anything, girls' diaries were even drearier; outside observers agreed that, in fact, the children had accurately captured the monotony of their life.[9] Even play was dull. Even apart from lack of equipment, the children showed little imagination or initiative at play, nor did the teachers help much. No one knew any new games. "The children seemed to stand around looking for something to do."[10] In bad weather the children just fooled around at recess time, unless the teacher played a phonograph so they could march up and down the aisles.

The Modern Sector

The modern sector of Iowa education encompassed the village, town and city school systems, rural consolidated schools, and, of critical importance, the high schools, colleges and universities which provided leadership. Authority was still decentralized, with most power in the hands of elected school boards, but was far more cosmopolitan in outlook, and keenly interested in the linkage between educational progress and social and economic modernization. The business of education was clearly

understood as modernization, or as one official committee explained it, "to increase the efficiency of all our people at every point of contact in life," more specifically, to give youth the opportunity to "develop the concrete efficiency required to found and maintain better homes; secure larger returns from labor; participate intelligently in civic affairs; live more helpful and efficient lives."[11]

The county and city school boards (as opposed to the neighborhood boards) comprised a reasonable cross section of the well education, cosmopolitan leaders of Iowa. Educational sensibilities, more than business experience, was the criterion for standing for this prestigious, but unpaid office. We have located 175 county and city board members for our sampling points in the 1915 census. Apart from lawyers and physicians, they were the best educated and wealthiest men and women in their communities. Six in ten had graduated from high school, 47% had attended college, and 23% had a college degree. Although a large majority of the population they served were farmers or blue collar workers, only 36% were farmers and the 1.7% who were skilled craftsmen were the only blue collar representatives. Indeed, 56% were professionals, leading businessmen or their wives. Since these boards dealt with larger issues than the neighborhood boards, it seems clear that more traditional voters deferred to the most modern, cosmopolitan leaders at this level of educational control.

Being a schoolboard member in Iowa was not a task reserved for old men with nothing better to do in their retirement. Almost half of the sample was under 50 years of age, and 12% were still in their thirties. Nor was the job an exclusive male sanctuary, as 11% of the sample were women. However, many of these women were probably appointed because their husbands were prominent in the county, for almost without exception

their husbands were professionals, although these wives were well educated with at least some college training. As the curriculum of this period so heavily emphasized Americanization, and civics in schools, it was not altogether surprising that only 6% of the Iowa schoolboard members were foreign born. Immigrants, like blue collar workers were not very common in administrative positions, and half the immigrants, were of British extraction. Potential for voter discontent might have arisen from the underrepresentation of Catholics--that was understandable in view of parochial schooling in the state--and the domination of the Boards by the old stock Americans. The latter's overrepresentation was not altogether surprising in view of the interest certain groups of old stock Americans took in educational achivevement as a vehicle for modernization.

Schoolboard members were not wildly at variance with their neighbors in terms of wealth, especially when their age and occupation is considered. The mean income of this sample of school board members was $2,653 in 1915, almost one and a half times that of the average Iowan. Old stock Americans on school boards earned even larger salaries, with a mean of $3,200. The majority of school board members who were farmers were also in a far more favorable economic condition than the ordinary men who owned 160 acres. Some members undoubtedly were ciphers, but others, considering that they had to run the gauntlet of election, on balance were impressive. In Davenport, which probably had the best run school system in Iowa, the School Board was composed of an architect, two doctors, a newspaper editor, the county treasurer, a bank president and a lawyer, all of whom except the county treasurer had been to college. School boards needed financial expertise, they needed a representative of county government, lawyers and other experts, and except for the lack of a woman representative the Davenport City School system was well

endowed. Again, in Story County, a county with a reputation of having a progressive attitude toward rural education, the credentials of the county board, though less impressive, were all the same reasonably well balanced. Story had no less than three women on its board: the wife of a clothing merchant with two years of college, the wife of a farmer also with two years of college, and the wife of a bookkeeper with one year of college. Perhaps they had once been teachers themselves. Other members included a businessman who had once been a teacher, a banker, and a doctor, all of whom were college graduates.

Teachers in the modern sector were professionals working in proud new buildings, under the supervision of experts, with access to good libraries and teaching materials, and judged against the best national standards by cosmopolitans. Most were imbued with a sense of their duty to modernize society by educating its youth. Despite their prestige, as Willard Waller noted, they stood out clearly against the background of the community in general. "They are young, well educated, usually transient and discontent. They are strangers."[12] The problem was that despite their education and cosmopolitan outlook, they were paid far less than businessmen or professionals with comparable qualifications, and were firmly implanted in the lower range of one of the few great bureaucracies in Iowa.

An exploration of the psychology of teachers is beyond the scope of this study. However, we are able to throw some light on their social and economic condition using various published surveys and, especially, data on a thousand career teachers in our sampling points in 1925 drawn from the state Educational Directory and matched into the census.

An Illinois survey of career teachers in 1917 offers a profile that could not have been too dissimilar to the situation in nearby Iowa.

Three fourths of the teachers had been born in the state; 31% grew up in the country, 18% in towns, 45% in cities (rather more than Iowa). The fathers of 37% were farmers, 33% white collar workers, and only 29% blue collar. The older and better educated a teacher, the higher the grade she taught and the larger the salary. Those with high school diplomas earned $573, with normal training $630, with college experience $700. Half the women became teachers between the ages of eighteen and twenty-one (the men began a year later). Those who began in country schools shifted to town schools within a year or two, knowing how difficult a rural teaching career would be. A third of the women and men became teachers because they liked the profession; 46% of the women, but only 36% of the men were attracted by the salary; most of the remaining men cited bookishness for their reason, but the remaining women mentioned their love of children. Half the women cited the salary as the reason for remaining teachers, 40% the attractiveness of the job. Half the men stayed teachers because they liked the profession, only 30% for the salary, and 10% confessed they were not prepared for any other occupation. With a median class size of thirty-eight students, the teachers had plenty to do. However, they also spent an hour or two a day after class grading papers or preparing lessons. Very few visited the parents of their charges.[13]

Living arrangements always posed a problem for the young women. In Illinois, 75% of the women and 64% of the men lived with their parents or other relatives. (In Iowa, however, the proportions seem to have been half these.) Their schools were located within a mile or so of their residence in two thirds of the cases, so transportation was not a major problem. In Iowa, 90% of the teachers reported a religious affiliation, and 100% were expected to be models of decorum in the community.

Teachers were supposed to contribute to the spiritual as well as the intellectual climate of their communities--to sing in the choir or teach in Sunday school. In Illinois, half the teachers devoted two or more hours a week to these activities, many specifically stating that it was expected or even required of them. It had always been clear that teachers "cannot afford to use liquor, tobacco, profanity or to make light of anything held sacred by the pupils."[14] Dating, dress, deportment and betrothal were public matters in the small towns, and teachers had to be careful. Most schools either immediately fired a woman who married, or did so at the end of her contract. Under special conditions a mother might obtain a job, usually if she was the sole support for her family, which otherwise might become a drain on the poor farm. Only in the larger cities could the teachers escape close supervision of her behavior. In the small towns women who were not living with their families might have difficulty finding a suitable place to live; the ease with which she adapted herself to the community often hinged on her choice of accomodations. For this reason many smaller Iowa towns had a "teacherage"--a respectable boarding house for the teachers. In Forest City, Clarksville and Mason City, most of the women lived cooperatively in boarding houses. In Waukee, all the male and female teachers boarded with the school superintendent. Although their salaries were relatively low, living expenses were minimal, particularly for the single women. As the 1917 Illinois survey shows, the teachers were able to save and invest, to buy books and magazines, and to enjoy summer vacation by trips to the east or west coast or to the mountains.

Our profile of career teachers in Iowas in 1925 reveals a cosmopolitan group with local origins. Three-fourths were born in Iowa; only 2% were foreign-born--chiefly Irish and German Catholic nuns connected with the

parochial schools of Dubuque and Dyersville. The majority of older teachers came from modestly well-off and prosperous farm families who encouraged at least one daughter to finish high school and then take teacher training courses. The younger teachers had more urban backgrounds, and had taken advantage of high schools in their home town.

The Yankee-pietistic ethos dominated education in Iowa, both intellectually and in terms of the origins of the career teachers. Germans, British and Scandinavian groups were underrepresented, though the Irish were proportionally represented. However, without exception the Irish in our sample were women, an interesting insight into the sex roles and occupation preferences of this group. But it was the Yankee heritage which induced 40% of the teachers to obtain a college degree.

Only at the very end of our period were the larger school systems in Des Moines and Sioux City adopting salary scales that determined pay on the basis of specific qualifications, experience and ratings. In 1925, when our income data were collected, salaries were determined by an informal market in which each teacher bargained with the superintendent. A stepwise multiple regression equation shows that income could be estimated knowing (1) sex, (2) experience, (3) education, (4) size of place, (5) level of school, and (6) age, in that order of strength (see also table 7.1).

$$\text{Income} = \$1184 + \$748\ X_1 + \$23\ X_2 + \$84\ X_3 + \$243\ X_4 - \$199\ X_5 + \$4\ X_6, \quad R^2 = .270$$

The interpretation of this equation for our career teachers is that, starting with a base of $1184, a teacher could add $748 if he was a man, add $23 for every year in the position, $84 for every year of

Table 7.1

Career Teachers: Zero-Order Correlations

	Male or Not 1	Years in Position 2	Years in Col. 3	City or Not 4	Elementary Sch.or Not 5	Age 6	Married or Not 7	Income 8
2	-.07							
3	.24	-.13						
4	.04	-.13	-.01					
5	-.24	-.08	-.33	.10				
6	.02	.50	-.05	-.19	-.11			
7	.46	.06	.15	-.01	-.09	.05		
8	.34	.27	.23	-.15	-.28	.21	.17	
Mean.	13.5%	7.6	2.9	15.3%	47.9%	35.8	17.7%	$1717
S.D.	34.2%	9.9	1.6	36.1	49.9	11.1	38.2	$866

Source: The sample was drawn from the Iowa Educational Directory (Des Moines: State of Iowa,1926), and traced to the State Census of 1925. The majority of the variables came from the Census, however, income, and positon in the school system were derived from the Directory.

college, $243 for a city system, lose $199 for teaching in an elementary school, and add $4 for each year of age. The predictive power is modest, with only 27% of the pattern of earnings fully predicted by these variables. Of course, we have entered no measure of personality, classroom performance, diligence, or friendliness toward the superintendent. These missing variables were more important in 1925 than the ones we have measured, though with the coming of fixed scale salaries the measured variables would increasingly become the determinants of salary. The critical importance of sex--it was worth $748 after all other characteristics were held constant, and alone explained 12% of the pattern--cries out for further analysis.

Sex roles were clearly defined in Iowa. Women had driven most men out of elementary teaching in the late nineteenth century, apart from some grammar school principals in the cities. Once they had proven their ability to maintain discipline, their availability at low salaries made the outcome inevitable. Well educated young men, of course, had far more career options open to them. At the high school level the situation was more complex. One-fourth of the high school teachers were men, but the proportion varied sharply from place to place--from 10% in Waterloo to over 40% in the German centers of Davenport and Burlington.

The expansion of high school programs after 1916 included a number of specialties, like driver education, physical education, agriculture and manual training that were dominated by men.[15] Of course, home economics and secretarial courses were reserved for women. Among the academic subjects, it seems that men were proportionately more numerous in science, mathematics, music, speech and civics, and even history, while English and foreign languages were female domains.

Probably more important in [illegible]ing sex roles was male ambition for administrative roles. Among careerists, 27% of the men and only 13% of the women were administrators. Clearly high school experience was more suitable preparation for a principal or superintendent, so three times as many career men were high school than were elementary teachers. Among women, the ratio was 2:1 the other way. The culture of the era held that men were more suited to handle budgets, deal with government officials, and hire and promote people than were women. In small towns where the high school was one of the largest and most prestigious institutions, setting policies that had economic and cultural ramifications throughout the community, men were thought to be the appropriate leaders. Women--seen as more pliable, more passive and more moral--were considered better fit to deal with little children all day. Undoubtedly there was a strong sentiment that it was the husband's duty to be a breadwinner, not the wife's, and that all women normally married. The permanence of a woman in an administrative role, therefore, was automatically in doubt.[16] These sentiments also militated against keeping a married woman as a teacher; perhaps also there was a lingering sentiment that a married woman would be too subservient to her husband to act efficiently in a team role in a bureaucratic structure.

Despite the slim liklihood of becoming a principal or superintendent, a certain career trajectory did emerge among the career women teachers. Indeed, there were two trajectories, for elementary and high school teachers, with little crossover. The consolidated rural schools were vast improvements over the district schools, even though class sizes were much larger. At last the teacher was working for professionals in a modern, efficient and achievement-oriented environment. The smallest towns had the youngest, least educated, worst paid elementary teachers,

chiefly recruited from local families. The turnover was very high, a third or more quitting annually, 45% to take another teaching job, 21% to get married, 7% to go to college, and 8% to enter another profession. The turnover in Iowa was nearly the highest in the country, indicating an enormous amount of shifting from place to place in search of amenities to make up for the salary scale, which was one of the lowest in the Midwest.[17] The successful teachers were the ones who secured jobs in larger cities, where salaries were higher, turnout lower, and opportunities for self expression more plentiful. In our sample, the average tenure among village schools was less than a year, but four years in small towns and eight years in the cities.

High school teachers likewise displayed very high turnover in Iowa, though they were recruited from college graduates, in distinction from college dropouts who went into elementary teaching. Seventy percent of the high school teachers came from the two state universities or from private liberal arts colleges, indicative of their wealthier, more cosmopolitan family origins. Only 13% of liberal arts college students came from farms, versus 32% of teachers' college students; among the remainder, 61% of the liberal arts students came from high status white collar homes, versus 49% of the teachers' college students. Iowa high schools thus recruited teachers whose family status was far higher than those of the student body.

Even at the best high schools in Iowa, it was unlikely that teachers were fully satisfied with their condition. A survey in 1915 of the prestigious schools accredited by the North Central Association showed Iowa ranked fourteenth among fifteen Midwestern states in teacher salaries, fourteenth in principal's salaries, thirteenth in value of equipment, and sixth in turnover. Fortunately, class size was average, at twenty

pupils per teacher.[18] Apparently the best educated were the least satisfied, for our sample shows teachers with four years of college averaged two fewer years in their current job than teachers with only two years of college. Similarly, the primary teachers had remained in the same job eight years. versus only six for the high school teachers.

Iowa's high turnover rates indicate dissatisfaction with the inefficient education efforts of a relatively rich state which was unabel to break the suspicious localism of the farmers, and smug complacency with low reported illiteracy rates. The smaller the community, the more unfavorable was the atmosphere, particularly for the older and better educated teachers. The 1910's and 1920's saw the construction of imposing school buildings in the majority of Iowa cities and towns, an indicator of community prosperity. Certainly the career teachers worked in far more affluent facilities than their predecessors. But the cultural tension was troubling. The Lynds, Waller and Hollingshead[19] perhaps misinterpreted the problems teachers faced, portraying as they did the dilemma of a teacher as an educator rapidly losing status. More likely, the teachers' prestige was rising too fast for the traditionalistic voters, who feared more "progress" would only mean higher taxes. Eventually the teachers and principals resolved their dilemma by turning the high school into the social and recreational center for the nearby area, with basketball teams, marching bands and plenty of hoopla to whip up enthusiasm of residents for a local institution. Likewise new emphasis on home economics, adult classes, manual crafts, driver training and physical education diverted attention away from the threat that well educated, widely travelled cosmopolitan teachers posed to the narrow parochialism of the youth of the towns. More cosmopolitan cities had little taste for these "gimmicks."[20]

Modernizers in Iowa clung to the belief that education would transform the state, bringing new levels of riches, culture and morality to the prairie. They could not convince the traditionalists to abandon one-teacher schools, sub-par salary scales and an implicit distrust of teachers. With no growth in heavy industry, Iowa escaped the influx of uneducated poor European and black immigrants who came to Chicago and Omaha, creating new dimensions of urban tensions. The farmers who believed that investment in better breeding stock was more profitable than investment in cognitive skills and cosmopolitan attitudes were, perhaps, economically correct. Certainly the tremendous crash in corn belt land values and farm prices produced hardship for men and women of all educational backgrounds. The importance of exogenous factors in determining the rate of return to education and agriculture was underscored between 1960 and 1973, when soaring prices for Iowa's meat and grain raised the state's relative personal income from 90 to 99. while California's highly intellectualized economy faltered, and its income level dropped from 122 to 111.[21] Of course, by then a goodly proportion of our younger sample cohort, especially the best educated, had moved to Southern California.

Notes - Chapter VII

1. Bird, Baldwin, et al, Farm Children, pp. 99-100; Ellwood Cubberley, "Politics and the Country School Problem," Educational Review 47 (1914), pp. 10-21.

2. Homer Seely, president of the State Teacher's College in 1884, quoted in Carroll Englehart, The Common School and the Ideal Citizen: Iowa, 1876-1921, Ph.D. Dissertation, University of Iowa, 1969, p. 89.

3. Baldwin et al, Farm Children, pp. 79-104; Anna Johnson,"Recollections of a Country School Teacher," Annals of Iowa, XLIV (1975), pp. 485-505; Illinois State Teachers' Association, The Illinois School Survey (Springfield: ISTA, 1917); Paul Pierce, A Survey of Three Rural Townships in Iowa (Iowa City: State University of Iowa Press, 1917), p. 55; National Survey of the Education of Teachers (Washington: U.S. Office of Education, Bulletin,1933, No. 10), esp. vol 2.

4. Baldwin, et al, Farm Children, p. 96.

5. Katherine M. Cook and A.C. Monahan, Rural School Supervision, U.S. Office of Education, Bulletin, 1916, No. 48.

6. Iowa State Census, 1925, p. lxv; Baldwin, et al, Farm Children, p. 100.

7. Baldwin, et al, Farm Children, pp. 263-273.

8. In contemporary America, the "differences between high schools contribute almost nothing to the overall level of cognitive inequality.. ..The average effect of attending the best [illegible] than the worst fifth of all elementary schools is almost certainly no more than 5." Jencks, Inequality, p. 93. Of course, this refers to alumni of modern schools with standards well above those of Iowa in 1900. The trend of performance on standardized aptitude, IQ and achievement tests was steadily upward in this country from 1914 to 1967. Jencks, Inequality, p. 63. For a review of studies comparing urban and rural men, see Pitirim Sorokin and Carle C. Zimmerman, Principles of Rural-Urban Sociology (New York: Henry Holt, 1930), chapter 11.

9. Baldwin, et al, Farm Children, pp. 141-143; for a sophisticated diary, see Vivian Hopkins, ed., "Diary of an Iowa Farm Girl," Annals of Iowa 42 (1973), pp. 126-146.

10. Baldwin, et al, Farm Children, p. 142.

11. Iowa State Teachers' Association, "Report of the Committee on Elimination," 1915, quoted in Englehart, pp. 134-135. Englehart's entire dissertation develops this theme.

12. Willard Waller, The Sociology of Teaching, p. 49.

13. Illinois State Teachers' Association, The Illinois Survey, chapters 1 and 2.

14. "Moral Training," Iowa Teacher 2 (1883), p. 385, cited in Engelhardt p. 64

15. Edward A. Krug, The Shaping of the American High School, 1920-1940 (Madison: University of Wisconsin Press, 1972), vol. II, pp. 147-177.

16. Henry Sabin, "Suggestions for the Improvement of a System of City Schools," Education 19 (1898), p. 5.

17. Compare Willard S. Elsbee, Teacher Turnover in the Cities and Villages of New York State (New York: Teachers College Columbia University Press, 1928); and Wendell White, "The Rate and Causes of Turnover of Iowa Teachers," American School Board Journal, 71 (1925), pp. 52-54.

18. U.S. Bureau of Education, "A Study of the Colleges and High Schools in the North Central Association," Bulletin, 1915, no. 6.

19. Robert and Helen Lynd, Middletown (New York: Harcourt Brace, 1929), pp. 206-210; Waller, The Sociology of Teaching, pp. 46-47; Hollingshead, Elmtown's Youth, pp. 121-147; cf. Lewis Atherton, Main Street on the Middle Border (Bloomington: Indiana University Press, 1954), pp. 120-125, 174-180.

20. Janett Murray and Frederick Murray, The Story of Cedar Rapids (New York: Stratford House, 1950), p. 156.

21. Statistical Abstract, (Department of Commerce, Washington, D.C.: Government Printing Office, 1974), p. 380.

Conclusions

"Iowa," said one of her most respected interpreters, "combines the qualities of half a dozen states; and perhaps that is the reason why it so often seems the most undistinguished place in the world."[1] While not altogether complementary in the context in which it was written, this characterization has distinct advantages for the historian who is attempting to make inferences about his findings to a larger population. For the educational environment in Iowa from the 1870's through the Great Depression was very similar to that found in other midwestern states. To be sure Minnesota and Wisconsin emphasized consolidated, modernized systems, and both spent larger sums of money on rural education. But Illinois, Kansas and Nebraska, for example, had dual modern and traditional systems, and like Iowa had a strong commitment to local control until well after the period.[2] The modern educational system in Iowa's villages, towns, and cities, was little different from that elsewhere in the non-metropolitan midwest, therefore we can be confident that the results of this study do have some relevance beyond the boundaries of the state.

By the 1960's education had become one of the major forces in American life. As Folger and Nam found in their census monograph, enrollments in high school and college were at an all time high, individual investment in education seemingly was handsomely rewarded, and unprecedented amounts of money were being spent by Federal and State governments on education.[3] In short the 1960's saw the high tide of euphoria over education as an instrument of national salvation. The object of this study was to examine an earlier period in the history of American education when the majority of the population had only a brief exposure to formal

schooling, and this often in a one room schoolhouse.

The first task was to establish accurate educational attainment returns for the general population, and for the various ethnic, religious, and occupational groups. Overall male heads of household had slightly higher educational attainment in 1925 than estimates had shown for the male population of the nation in 1920. More Iowans finished eighth grade than the national population, but fewer graduated from high school and college than in the rest of the country. Considering that the state had an early reputation for high educational attainment, these findings confirmed the impression that in the 20th century Iowa lost ground to the more industrial states because her rural education showed little or no improvement over the standard fare of the 19th century. Not surprisingly open country people had the lowest rates of attainment, and a majority, even in 1925, had only received a country school education. Because of the rural origins of most men, other types of community showed no particular advantage, and only cities and trading centers had more than 18% of their head of household population as high school graduates. Educational attainment, however, was a good indicator of occupational status, and Iowa returns compared favorably with post World War II levels of educational attainment among professionals and managers. Religion and ethnicity were also a valuable guide to differentiating the population as regards interest in educational attainment. In general the old stock population was better educated than the heads of household with immigrant antecedents. When religion was added to the ethnic analysis, old stock high status Protestants remained the dominant group in all ecological areas, and Lutherans and Catholics from various ethnic backgrounds showed least interest in education. However, the old stock population with less prestigious religious affiliations had very similar

educational attainment to their peers from ethnic groups who lived in similar environments.

Overall, household heads were less well educated than their spouses. More wives had enrolled in high school and college than their husbands. This trend was accentuated because there was a demand for teachers, in a profession dominated by women, and because credentialism gradually became more important in the 20th century. However, it was found that husbands were more likely to actually graduate from college, because men destined for professional occupations required a college baccalaureate or a professional degree. While the farm backgrounds of a large number of Iowans tended to obscure class as a major determinant of educational attainment, inter-generational comparisons between sample members fathers, the sample members themselves, and their children, showed that family background was an important determinant of staying in school. Among the children of the sample, those from high school status white collar homes were more likely to remain in school after the age of 14. Farmers' children were as prone to the drop-out syndrome, as their parents before them. On the other hand, it would appear that most farm children did stay in school long enough to complete the eighth grade. But it is worth noting that rural retardation rates between the age of 6 and 18 were very similar to those in the towns.

As agriculture continued to dominate the economy of Iowa throughout our period, the state slowly experienced industrialization during the first 25 years of this century. Rather Iowa's agricultural base became modernized, as the state responded to the pressures of national markets. In order to assess the effect of industrialization on the lives of the population, the study undertook a lengthy discussion of social mobility which measured inter-generational change in the occupational structure. Iowa's leisurely urbanization was analyzed in terms of lifetime geographical

mobility.

The central finding which emerged from this analysis was that the urban sector of the occupational structure was stabilized by the entry of men from rural backgrounds. For this reason there was less downward mobility in urban Iowa, for the rural-urban movers tended to shore up the careers of men who were born in cities and towns. At the same time a small number of rural men were very successful at competing with urbanites, and in fact dominated the professions in Iowa. The contraction of opportunities in farming, caused by high farm fertility, produced most of the movement of rural men to the cities, and was only too apparent in the open country where less than half of all sons who came from farm owner backgrounds could climb the agricultural ladder to the same occupational level.

What was the role of education in all this movement? Among farmers education made a minor contribution to patterns of inter-generational mobility, and increasingly inheritance of wealth was the key determinant of economic well-being on the farm. In urban Iowa, depending on the population that was analyzed, education had a more positive effect on socio-economic achievement. In the urban population as a whole, the influx of rural born men dampened the effect of background on education, occupation, and income. However, there was a reasonably strong relationship between education and occupation, and between occupation and earnings. It was among the rural-urban movers where education came into its own and showed a strong relationship with occupation. Unfortunately the analysis of the lifetime city dwellers was restricted to a small number of cases, but it was with this group where the strongest results were achieved. Although the strength of relationships was very similar to those found by researchers on modern populations, a major difference

centered on the influence of background characteristics on education and occupation. Father's occupation had a strong relationship with both education and occupation, suggesting that ascribed characteristics, rather than achieved, had a major influence on careers in this particular segment of the population. Men inherited the positions of their fathers, and most importantly education was primarily a mechanism which tended to stabilize social positions across generations, rather than, as was the case with the total urban population, and the rural-urban movers, a mechanism for providing upward social mobility. Thus only among farm boys who moved to the towns and cities to continue their studies was education a vital element in the mobility process. Our evidence would suggest that for those men who remained in the open country, and those who spent all their lives in the towns and cities, background remained important in career chances.

And here there is a connection between the social structure in Iowa, and a theme central to this study: the emphasis of the majority of the population on the accumulation of material capital (principally land), on the one hand and the modern concern with investment in education on the other. As the data showed, rates of return for high school and college training more than compensated earnings forgone for men aged 14-21; so the economic incentive for a college degree was certainly present. However, college remained, for the male population, the preserve of those from high status homes, and a few affluent farmers' sons. For the remainder of the population, and particularly the farmers, investment in education provided a form of "deferred compensation," whose benefits were so delayed that they preferred to invest in new breeds of cattle. Women of course did not fit into this framework very well, for they on the whole were better educated than men. However, in our discussion of

teachers, "the economic interpretation" of educational achievement did seem to make sense. Farmers were prepared to allow their daughters to go further on the educational ladder than their sons because, without other employment opportunities, educational credentials for women enabled them to get a job in the local district school, if not in the local village or trading center.

It was ironic that the educational system of Iowa gave farmers and small town dwellers authority over the educational future of their communities, but that so few took advantage of this opportunity to secure a better education for themselves or their children. Unlike, for example, the elitist European system of education where fierce competition limited entry into higher education to a privileged group, virtually any Iowa child with a little endurance and parental encouragement could graduate from high school or even gain entry to the State University.

This study, then, has focused on a period of transition when the modern channels of mobility through education were already in place, but the traditional opportunities for mobility through property accumulation remained more attractive to the average Iowan. From the perspective of fifty years, we can speculate that education could have provided the crucial escape route from economic stagnation. However, because the prosperity of agriculture between 1897 and 1920 fostered expectations that the economy would revive, there was no dramatic turning to education.

Cultural inhibitions against education were probably as important as any pocket book considerations. Paul Engle allowed one of his characters to express the special form of anti-intellectualism Iowa style perfectly. "College," said grandfather to his grandson, "is half baked ideas put out by a lot of half baked dopes who never did an honest day's work in their life."[4] To a man who held such opinions the local country school

became a key instrument in retaining the ideology of localism. Iowans were also notoriously tight fisted, and this weighed heavily on the side of the local school. The tax structure of the state was such that until the mid 1920's school costs were entirely born by property taxes. Farmers even with small acreages paid larger tax bills than did town dwellers. As a consequence, without reform of the tax structure, any consolidation between rural areas and small towns and villages was fiercely resisted. The only alternative, therefore, for open country areas, was consolidation with other rural school districts. Although there was enough evidence by the 1920's to show that the most expensive and inefficient education was from the small one-room school, few districts adopted consolidation.

The desire for local autonomy was probably more deep seated for it lingered on well after reforms were adopted over school financing. Like modern opponents of school reorganization, rural Iowans were reluctant to send their children to the "hostile" environment of a town, or another country neighborhood. They objected to the early forms of busing even though the pioneer efforts at consolidation had shown that, with good roads, busing was possible and did not cause undue inconvenience. Like contemporary anti-busing forces, ethnocentricism was a rallying point of resistance. But unlike the contemporary situation, where the benefits of reorganization remain blurred, consolidation for rural pupils had beneficial effects.[5] Iowans quest for modernity was powerless against the local one room school house, a symbol of traditional community identity which in the age of the automobile, the radio, and the demise of the rural church, was fast disappearing.

But the equation which linked education with upward social mobility was already proving itself in our period. Iowans had only to look round their state to understand that a modest background was no disadvantage

for success in life in the urban metropolitan world. Increasingly the Yankee ethos of turning one's back on the farm, of getting an education, and of migrating to the metropolis, filtered its way down to the most traditional orientated groups identified in this study.[6] By the time of the farm boom of the 1960's the wheel had turned a full circle. Farming had not only become an attractive occupation for men and women from non-farm backgrounds, it also required, to be successful, considerable economic resources, and a highly technical college education.

1. Ruth Suckow, "Iowa," The American Mercury. September, 1926, p. 39.

2. Department of Interior, Biennial Survey of Education, 1918-20, p. 18.

3. John Floger and Charles Nam, The Education of the American People, (Washington, D.C.: Bureau of Census, 1967), passim.

4. Quoted in Roy W. Meyer, The Middle Western Farm Novel in the 20th Century (Wisconsin: University of Nebraska Press, 1965), p. 100.

5. In our period consolidation was the answer to low teaching standards and poor school equipment and facilities. However, with the technological revolution in teaching aids, the small school has recently picked up articulate advocates. See Roger G. Baxter and Paul V. Gump, Big School, Small School (Palo Alto: Stanford University Press, 1964), passim.

6. Curtis Harnack, We Have All Gone Away (New York: Doubleday, 1973) for a fine semi-fictional account of this process.

The Sample, and the Problem of Case Attrition

The experience of historians and sociologists had shown that in panel studies which require the follow up of respondents, and census studies that require tracing individuals for a period of five years or longer, attrition rates were typically very high. As information in this study had to be obtained in some cases forty years before at a time when some northwest Iowa counties were still sparsely populated, the large sample size was drawn as an insurance against high attrition rates. By searching through an entire state, our attrition rates were modest. Some 66% (2715) of our 1925 sample heads were traced to 1915, and a 51% (2102) return was made on inter-generational cases. In view of the fact that this was an era of mass immigration, the results, even for a comparatively isolated state like Iowa, were better than expected. As many as 38% (1574) of the fathers of our sample were foreign born, and 14% (569) of the sample themselves were immigrants. An inability to obtain population listings for years other than 1880 and 1900 obviously restricted our success in tracing. Unfortunately the Iowa listing of 1915 was alphabetized by county, and as there were 99 counties in the state, only a few could be checked. For the more dynamic aspects of this study, especially the inter-generational analysis, the final sample was biased. As might be expected these biases tended to exclude those who were younger, who were not Iowa born, who were not old stock, and who had lower occupational status, and were less well educated.

Were these biases so serious as to negate any findings in this study? Certainly the initial reaction is sobering, but as far as the

collection of the basic variables were concerned, the tracing problem had little effect. The 1925 census of Iowa listed education, household relationships, birthplace, occupational group, and for urban areas, home value and home rental. In addition, every effort was made to collect tax data for farmers from courthouse records. Therefore, as far as answering some of the basic questions about education and social structure in Iowa, we were on fairly firm ground. On the other hand, much of the multivariate analysis which used the earnings variable heavily, and in addition, was orientated towards inter-generational changes in the social structure, can only be considered reliable for the Iowa born population. It could be argued, with some justification, that Iowa had already reached the melting pot stage by 1925, in which case, even the multivariate results were a reasonable approximation for the target population of those living in Iowa in 1925. One final word of caution about the main sample concerns the 234 women heads of household who consitituted some of the sample members. As almost all of these women were widows, wherever possible, the occupations of their husbands, and husbands' fathers, were used in the intergenerational model.

Two additional samples were collected, primarily for gauging differentials between the relatively stable 1925 sample when it was traced to 1915, and a population in which migration was not a factor. These two groups were random stratified samples of the counties in which the 1925 sampling units were located. The counties were sampled according to the numerical strength of their ruralness and urbanness in 1915. One sample contained farmers and farm laborers living in the open country, and the other was drawn from villages, towns, and cities.

The Measurement of Status

As with any study which deals with the past, the problem of occupational status was a bothersome issue which troubled us from the start, and was never really solved. As Table A shows we were able to construct a reliable status index of occupations which pushed back George Counts' original formulation ten years to 1915. For any researcher dealing with a period and environment similar to that of this study, this index should prove more than adequate. However, as it was constructed with the very variables which were most vital in the multi-variate regression process, income and education, the occupational index could not be employed without confusing the results. Accordingly a generic status index was calculated from the specific status scores with the highest status occupations from 160 through 121 given 10 and the lowest (86 through 89) given the value 1. This scoring system was used in all the regressions in Chapters 5 and 6. While such a scheme was far from ideal, it did have an empirical basis to it, and avoided the only alternative which was to use dummy variables for occupational classification.

Although the status as given to farmers in Iowa in relation to the rest of the occupational structure was obviously sound, the measurement of the status of farmers in relation to themselves was far from ideal. Not all sample heads were matched with economic records in 1925 because six of the counties sampled had destroyed their tax records. In addition, and perhaps more serious, the economic data for fathers who were farmers was scarcer than originally anticipated. The largest group of men who were traced back in time were found on their fathers' farms in 1900. While there was economic data available for inter-generational measurement of status differences in 1870, 1880, and 1915, the lack of wealth material in 1900 prevented even an economic index of status for fathers to be

in 1900 prevented even an economic index of status for fathers to be constructed for the whole farm population. Thus our analysis of farm mobility was restricted, either to instances of owning or renting intergenerationally, or comparisons between specific cohorts of men. An accurate measure of status on the farm which takes into account land, animals, house furnishings, machinery, education, income, and institutional membership, awaits construction.

A Note on Constant Occupational Structure

In Chapter 4 an important aspect of the discussion of change in the occupational structure of Iowa over a generation concerned the analysis of a standardized distribution of the occupations of fathers and sons. Briefly the methodology for this operation was as follows: first the sons marginal distribution was altered so that it became identical with the marginals of the father. And second that the cell frequencies in the intergenerational matrix were altered so that they corresponded to the new marginals distribution. In essence we were asking the counter factual question: "What rates and patterns of occupational status change would have been obtained in Iowa had the occupational structure of Iowa remained precisely constant between father and son?" In order to follow this procedure a program was written on a mini-computer which was capable of standardizing a 5 by 5 table. The small dimensions of tables 4.17A and 4.17B in Chapter IV provide an opportunity to demonstrate how to standardize a table. The raw numbers are shown in table B and table C. The problem is to adjust the cell entries in table C so that the row and column sums will equal those in table B. The first stage is to multiply row 1 of table C by $\frac{267}{171}$ and row 2 by $\frac{92}{86}$. This gives table

D. Now multiply the columns of table D by $\frac{284}{283.63}$ and $\frac{75}{120.37}$ giving table E. Notice that the columns now sum to 284 and 75, and that the rows sum to 274.38 and 84.62. Stage two repeats the process: multiply the table E rows by $\frac{267}{274.38}$ and $\frac{92}{84.62}$ to get table F. Multiply the table F columns by $\frac{284}{282.90}$ and $\frac{75}{76.10}$ to produce table G. One more iteration for polish gives table H, which translated into percentages is table 4.17C in Chapter IV.

Sources

Much of the data analyzed in this study can be found in the State Department of History in Des Moines. The tradition of collecting exhaustive agricultural statistics probably influenced the Iowa authorities to make up questionnaires which were more searching than those of the federal census. While this data (earnings, religious affiliation, and education) can be found in the manuscripts, very little material was ever tabulated in usable form. For this reason, studies such as this, require long hours of data collection, record matching, coding, and computer analysis. The data tapes are available for reanalysis through the Family and Community History Program of the Newberry Library in Chicago.

Table A

Mean Education, Income, and Occupation Scores, Iowa, 1915.

Occupation	Education in Years	Income	Score	N
Doctor	15.8	$3981	160	18
Veterinarian	13.7	3166	144	4
Dentist	16.0	2000	138	1
Lawyer	16.0	1783	135	6
School Superintendent	16.5	1300	132	2
Company Officer	11.0	2642	129	8
Druggist	12.4	2160	129	7
Nurseryman	13.0	1900	127	3
Mortician	12.0	1800	123	1
Bank Cashier	12.2	1720	123	4
Coal Dealer	12.0	1900	123	1
Civil Engineer	14.0	1125	122	2
Livery Stable Owner	8.8	2625	121	5
Banker	10.3	2156	121	6
Real Estate Executive	10.5	2026	120	10
Shoe Store Owner	11.7	1275	116	4
Company Officer	10.3	1680	116	9
Accountant	12.0	1200	116	1
RR Mail Clerk	13.0	800	115	2
Newspaper Publisher	9.0	2000	115	1
Billiards Hall Owner	8.3	2200	115	3
Minister or Priest	12.5	1100	115	2
Court Reporter	11.5	1250	115	2
Rent Collector	12.5	875	114	2
Teacher	12.5	642	112	11
Life Insurance Agent	11.6	927	112	8
Local Govt. Official	8.5	1850	112	6
Post Master	12.0	800	112	1
Salesman	10.0	1307	111	33
Lumber Merchant	8.0	1950	111	3
Hardware Dealer	10.9	1012	110	10
RR Conductor	10.0	1200	109	1
Shipping Clerk	10.8	768	107	5
Auctioneer	10.0	1000	107	1
Bank Employee	10.1	866	106	2
Surveyer	12.0	260	106	1
Small Manufacturer	8.5	1350	106	4
Photographer	9.2	1133	106	4
Farm Stockbuyer	7.5	1587	106	8

Table A
(Cont)

Occupation	Education	Income	Score	N
General Merchant	8.8	$1185	105	54
Well Driller	8.3	1300	105	2
Newspaper Editor	8.6	1200	105	2
Small Businessman	8.5	1182	104	4
Inspector	9.2	921	104	8
RR Switchyard Boss	8.8	1025	104	1
State or County Employee	8.0	1266	104	6
City Letter Carrier	8.6	1075	104	17
Furniture Store Owner	8.6	1000	103	3
Foreman	8.8	990	103	11
Real Estate Agent	8.6	1000	103	2
Bookkeeper	9.0	920	103	12
Barber	8.9	856	102	11
Grocery Store Owner	8.5	900	101	7
Restaurant Owner	8.4	928	101	7
Porter	9.8	494	101	5
Grocery Clerk	9.3	597	101	2
Wagon Maker	8.0	1000	101	3
General Store,Village	7.8	1000	100	2
Taxi Driver	7.5	1050	100	2
Watchmaker	8.0	936	100	1
Clothing Store Owner	7.6	1050	100	3
Telephone Lineman	8.0	812	99	2
Plumber	8.2	813	99	8
Policeman	8.0	840	99	2
Farm Owner	6.7	1271	99	650
Butcher	7.4	932	98	11
Farm Renter	7.3	926	98	386
Shoemaker	8.0	733	98	3
Fireman	8.1	765	98	8
Bartender	7.6	759	97	11
Repairman	8.5	500	97	2
Messenger	7.2	910	97	5
RR Engineer	6.5	1147	97	8
Plasterer	8.0	678	97	7
Electrician	7.3	803	96	6
Blacksmith	6.7	929	96	21
Harnessmaker	7.7	663	96	9
Deliveryman	8.0	500	95	2
Tailor	6.2	1016	95	7
Machinist	7.3	707	95	13
Mason	7.8	575	95	7
Baker	7.2	605	94	5
RR Fireman	6.8	770	94	5
Farmer's Son,on Father's Farm	8.5	278	94	188

Table A
(Cont)

Occupation	Education	Income	Score	N
Grain Buyer	5.0	$1333	94	5
Carpenter	7.2	614	94	65
Advertising Agt	8.5	180	93	2
Janitor	6.8	654	93	16
Roofer	6.7	705	93	4
Bricklayer	7.0	600	93	3
Printer	6.5	786	93	7
Cement Mixer	6.6	700	93	3
Driver	6.7	631	92	11
Boiler Maker	5.6	953	92	3
Rooming House Owner	6.8	491	91	7
Teamster	6.4	566	91	20
Cigar Maker	6.8	447	91	3
Farm Laborer	7.0	332	90	176
Unskilled Laborer	6.6	471	90	138
Tinner	5.0	864	89	2
Buttermaker	5.0	840	89	2
Construction Worker	5.3	733	89	3
Upholsterer	6.0	500	88	2
Mechanic	4.6	840	88	5
Gardner	6.2	383	88	3
Dry Cleaner	5.0	750	88	2
Pattern Maker	6.0	425	88	3
Miner	5.1	512	86	20

Source: Sample Data.

Table B

	Owner	Tenant	Sum
O	235	32	267
T	49	43	92
Sum	284	75	359

Table C

	Owner	Tenant	Sum
O	122	49	171
T	45	41	86
Sum	167	90	257

Table D

190.49	76.51	267.00
48.14	43.86	92.00
238.63	120.37	

Table E

226.71	47.67	274.38
57.29	27.33	84.62
284.00	75.00	

Table F

220.61	46.39	267.00
62.29	29.71	92.00
282.90	76.10	

Table G

221.47	45.72	267.19
62.53	29.28	91.81
284.00	75.00	

Table H

221.34	45.67	267.01
62.66	29.33	91.99
284.00	75.00	

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